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ABSTRACT

The 2001 Campus Computing Survey, the 12th such survey, is the largest continuing study of the role of computing and information technology in U.S. higher education today. The survey results in this report summarize data from 590 two- and four-year, public and private colleges across the United States, representing a 38.4% response rate. The focus is on academic computing, the use of computers and information technology in teaching, instruction, and scholarship, and not on the use of computers in academic administration. Findings show that colleges and universities are making slow yet steady progress with regard to e-commerce and e-service initiatives in spite of budget cuts that affect all sectors of U.S. higher education. As in the previous 5 years, survey respondents identify "assisting faculty to integrate technology into instruction" as the single most important information technology issue facing their campuses. Campuses continue to struggle with technology planning, but the use of technology to support instruction continues to rise. Wireless networks are becoming an increasingly important issue for all sectors of higher education. One of the myths of higher education is that all students have access to high speed networks, but in fact, only a small percentage of students have access around the clock. There are great variations with regard to off-campus Internet access, and Internet Service Providers are most commonly offered to students who live in dormitories on campus. Three appendixes contain a discussion of methodology, the 2001 questionnaire, and a list of participating institutions. (SLD)

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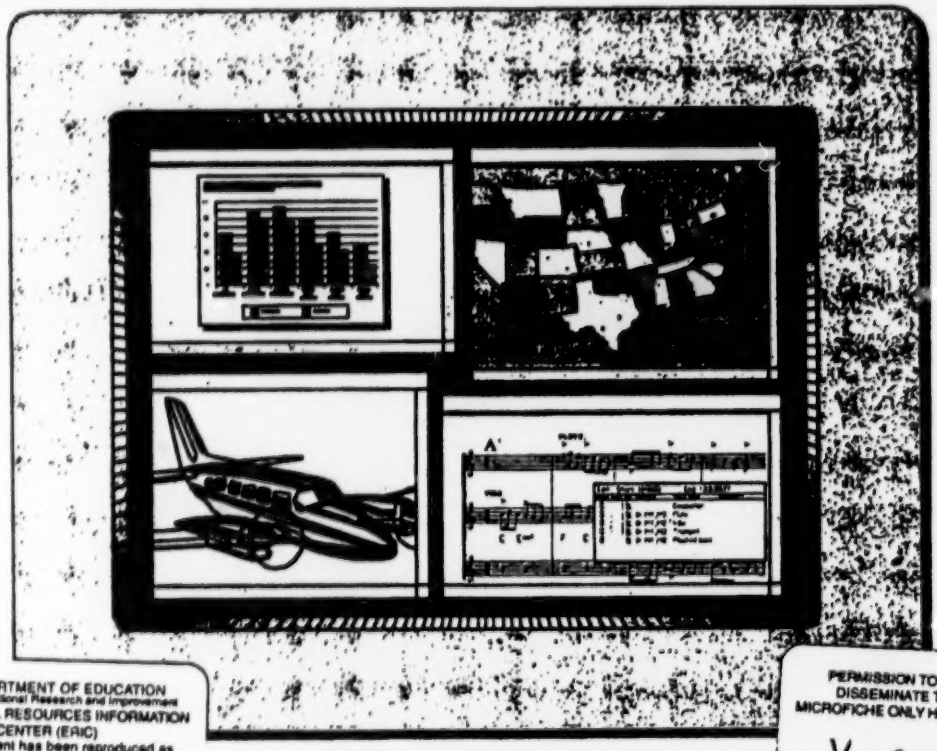

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CAMPUS COMPUTING 2001

The 12th National Survey of Computing and Information Technology in American Higher Education

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December, 2001

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THE CAMPUS COMPUTING PROJECT

Begun in 1990, the Campus Computing Project is the largest continuing study of the role of computers and information technology in American higher education.

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Past (out-of-print) editions of the annual Campus Computing Survey Report (1990-1999) are available on microfiche from the ERIC Clearinghouse Service sponsored by the US Department of Education: please check the *AskERIC* Web site of The ERIC Clearinghouse on Science and Technology at Syracuse University (http://ericir.syr.edu) or the ERIC Clearinghouse on Higher Education at The George Washington University (http://www.eriche.org).

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CAMPUS COMPUTING, 2001

The 12th National Survey of Computing and Information Technology in American Higher Education

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CAMPUS COMPUTING, 2001

The 12th National Survey of Computing and Information Technology in American Higher Education

The Campus Computing Survey, now in its 12th year, is the largest continuing study of the role of computing and information technology in American higher education. The 2001 Campus Computing Survey was conducted during summer, 2001.[1] The survey results presented here summarize data from 590 two- and four-year public and private colleges and universities across the United States.[2]

The annual Campus Computing Survey focuses primarily on *academic computing*, i.e., the use of computing and information technology resources to support and enhance teaching, instruction, and scholarship. The survey does not specifically address the role of computing and information technology as a resource for academic administration (e.g., registration, financial management, or student records). The survey respondents, typically the chief academic computing or information technology officers at their institutions, are individuals specifically responsible for and knowledgeable about the current direction of technology planning, policy, and implementation efforts on their campuses.

The 2001 questionnaire was mailed in June, 2001 to the chief academic computing officer at 1,537 two- and four-year colleges and universities across the United States. Where it was not possible to identify a specific individual with a senior academic computing title, the questionnaire was sent to the senior academic officer. A total of 590 surveys were received by October, 2001, yielding a 38.4 percent response rate. (Additional information about the survey methodology is provided in Appendix A.)

The 2001 Campus Computing Survey

Colleges and universities are making slow yet steady progress on eCommerce and eService initiatives, according to data from the 2001 Campus Computing Survey. More than a fourth (27.6 percent) of the participating campuses can process credit card payments from their campus Web sites, a gain of 50 percent in the past year (up from 18.6 percent in 2000 and 5.1 percent in 1998). About one-eighth (11.8 percent) of 2001 survey respondents report that their campus has a strategic plan for eCommerce, compared to 6.8 percent in the 2000 survey. And over half (55.4 percent) of the institutions participating in the 2001 survey report that their campus Web site offers on-line course registration, up from 43.1 percent in 2000 and 20.9 percent in 1998 (Figure 1).

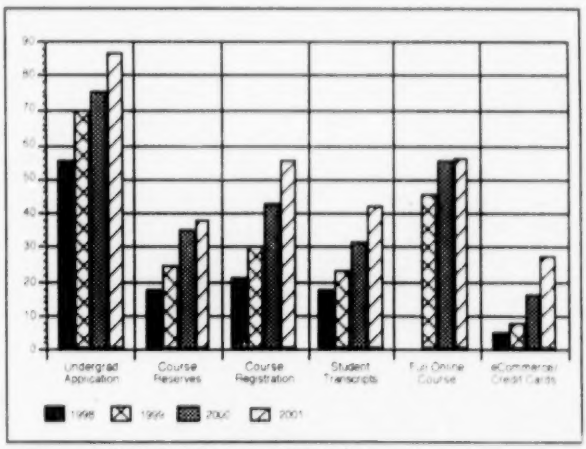

Figure 1: Web Site Services, 1998-2001
(percentages for all institutions)

The good news reflected in the 2001 data is that the past year saw some significant gains on a number of eCommerce and eService measures across all sectors of higher education. However, there is ample

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[1] The 2001 National Survey of Desktop Computing in Higher Education was supported, in part, by the following sponsors: Advanced Micro Devices, Adobe Systems, Apple Computer, Blackboard, Campus Pipeline, Cedar, Cisco Systems, CollegisEduprise, Compaq Computer Corp., Converge Magazine, DataTel, Dell Computer, EDUCAUSE, Eduventures, Follett Higher Education Group, Gateway Computer, Houghton Mifflin Company, HorizonLive, IBM Higher Education, KPMG Peat Marwick, Macromedia, Microsoft Corp., National Education Association, Palm Computing, Pearson Education, PeopleSoft, Prometheus, SAS Institute, SCT Corp., Software Industry & Information Assoc., Sun Microsystems, Symantec Corp., Thomson Learning, WebCT and Xanedu.com.

[2] More than 30 private two-year colleges were included in the survey mailing. However, the low response rate from this group should not be viewed as being representative of the larger population of the 615 private, degree-granting, two-year colleges in the United States.

evidence that the campus community is still playing catch-up on key eCommerce and eService issues. Given the wide array of electronic commerce options and electronic service experiences routinely available to students and faculty in the consumer and corporate sectors, it is clear that the campus community is perhaps two years behind in its eCommerce/eService offerings.

	Public University	Private University	Public 4-Yr College	Private 4-Yr College	Community College
undergraduate application	98.8	100.0	91.7	90.2	70.5
financial aid application	85.7	73.1	62.5	46.9	51.4
course catalog	100.0	96.2	94.2	84.4	84.9
course registration	79.4	88.5	72.5	37.9	55.5
online courses	84.1	53.8	83.3	35.5	74.0
library/card catalog	98.8	100.0	93.3	85.3	78.1
course reserves	79.4	69.2	44.2	40.2	8.9
student transcripts	69.8	69.2	50.8	33.5	34.2
IT support resources	90.5	88.5	83.3	69.6	37.7
instructional software	81.0	69.2	64.2	32.6	18.5
college book store serices	87.3	73.1	67.5	57.1	43.2
eCommerce (fee payment)	49.2	42.3	41.7	17.9	20.5

Figure 2: Campus Web Site Services, 2001
(percentages by sector)

The gap on eCommerce/eService that separates campus and consumer markets is clearly reflected in the experience of tens of thousands of college freshmen in fall 2001: at campuses across the country, newly arriving college students were offered a wide array of eCommerce and eService options from the commercial enterprises that want their business and their loyalty. Via the Web, college students can easily and securely access their bank and credit card accounts or check on their long distance bills. Yet many colleges do not yet provide parallel, Web-based services for their students – online transcripts, course registration, financial account or financial aid information.

These data suggest that the issue ahead for campuses is not just eCommerce – credit card transactions on the Web for tuition, textbooks and campus t-shirts – but a broader set of eService issues that support the instructional mission and enhance a wide array of campus services.

Indeed, other data from the 2001 survey highlight the lagging eCommerce/eService infrastructure in the campus community. This year's survey respondents rate the campus capacity for eCommerce last on a list 11 different technology infrastructure metrics that include network and telecommunications services, user support services, online instructional resources, network security, and IT training for students and faculty (Figures 3 and 4).

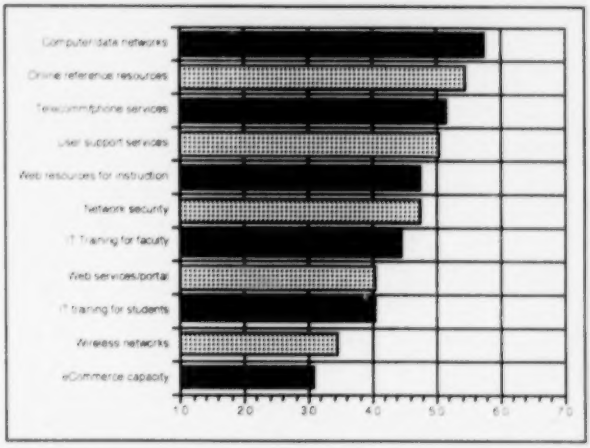

Figure 3: Rating the Campus IT Infrastructure, 2001
(all campuses; scale: 1=poor, 7=excellent)

	Public University	Private University	Public 4-Yr College	Private 4-Yr College	Community College
Computer networks	6.1	5.8	6.0	5.8	5.6
Online reference resources	5.7	5.2	5.7	5.5	5.3
Telecomm/phone systems	5.8	5.5	5.5	5.2	4.8
User support services	5.0	4.7	5.2	5.2	5.0
Web resources for instruction	5.3	4.7	5.1	4.7	4.7
Network security	4.9	4.7	5.0	5.0	4.5
IT training for faculty	4.6	4.2	4.7	4.5	4.3
Web services/portal	4.4	4.2	4.2	3.9	4.0
IT training for students	4.3	3.9	4.1	4.0	4.2
Wirless networks	3.8	4.0	3.3	3.5	3.3
eCommerce capacity	3.7	3.4	3.5	2.9	3.2

Figure 4: Rating the Campus IT Infrastructure, 2001
(by sector; scale: 1=poor, 7=excellent)

Technology Budgets

Adding to the eService/eCommerce challenges ahead for colleges and universities are the budget cuts underway across all sectors of American higher education. The 2001 survey data provide clear indicators of declining technology spending during the current academic year (Figure 5).

About one-fifth (18.0 pct) of the institutions participating in the 2001 Campus Computing Survey report a decline in the academic computing budget at their campus for the current academic year, compared to about one-eighth (11.4 percent) in the 2000 survey report. In contrast, half (51.6 percent)

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of the survey respondents report increases in their institution's academic computing budget for 2001/2002, down from 58.0 percent reporting gains in 2000/2001. The percentage of campuses reporting reduced funds for academic computing appears largest among public universities and community colleges (over 25 percent; see Figure 5 below).

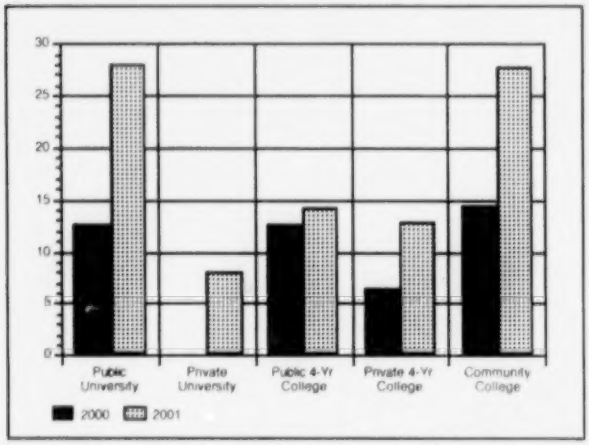

Figure 5: Decline in Funding for Academic Computing
(percentage of campuses reporting reduced funding for academic computing, by sector, 2000 vs. 2001)

Similarly, the 2001 survey data signal a downturn in spending on administrative computing. As above, almost one-fifth (18.3 percent) of the survey respondents report a decline in the campus budget for administrative computing, compared to one-eighth (11.7 percent) in 2000.

A final indicator of declining technology budgets for the current academic year (2001/2002) is reflected in IT purchasing plans. Across all sectors, four key purchasing indicators (purchasing by academic units, purchasing by administrative units, all institutional purchases of desktop/notebook computers, and purchases of network servers) show declines in the percentage of campuses reporting "increased purchases" and greater numbers institutions reporting "reduced purchasing," compared to the 2000 data.

Preliminary analysis of the first 300 questionnaires received in July and August 2001 suggest that the downturn in IT budgets was underway well before the tragic events of September 11th. The downturn in IT funding reflects, in part, the downturn in the US economy over the past 12 months. Moreover, the downturn reflected in the 2001 survey data comes at the end of a seven year cycle in which campus technology budgets increased dramatically. Coming out of the recession of the early 1990s, funding for campus IT resources was spurred on first by the emergence of the Web in the mid-1990s, and later by Y2K issues at the close of the decade. Even absent the current economic slowdown, it seems likely that the campus community would have had a natural downturn in technology funding after seven years of steady gains across all sectors.

Key IT Issues

As in the past five years, survey respondents across all sectors of higher education identify "assisting faculty integrate technology into instruction" as the single most important IT issue confronting their campuses "over the next two or three years" (Figure 6). Roughly a third (31.5 percent) of the 2001 survey respondents cite instructional integration as the key IT issue for their institutions in the coming years (compared to 40.5 percent in 2000 and 29.6 percent in 1997).

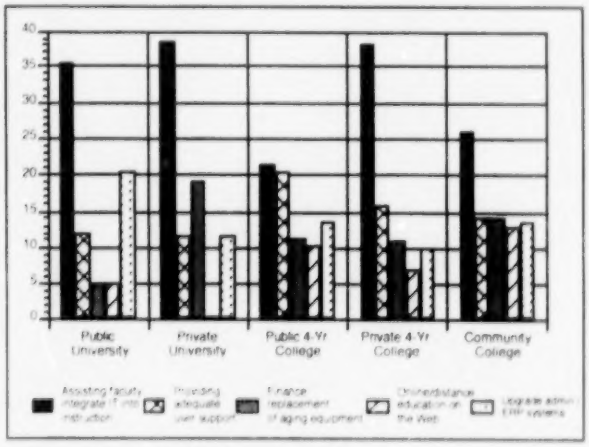

Figure 6: Single Most Important IT Issue
(percentages, by sector, mutually-exclusive responses)

Across all sectors, "providing adequate user support" again ranks second in the 2001 survey (15.4 percent in 2001, compared to 22.3 percent in 2000 and 25.0 percent in 1997). However, a new item on the 2001 survey, "upgrading/replacing administrative/ERP systems," ranks third. (Survey respondents in public universities rank the ERP upgrade issue second.) Roughly one-sixth (12.6 percent) of the survey respondents identify ERP issues as "the single most important IT issue" for their institution over the next 2-3 years. And roughly equal proportions (about 11 percent) of the 2001 survey respondents report that training and retaining qualified IT staff and "financing the replacement of

aging computers/technology" are their top institutional technology challenges.

The survey data also identify a set of strategic issues of significant concern to campus officials. The five strategic issues shown in Figure 7 are the ones that received the highest ratings from a larger list of 28 items that cover instruction, personnel, budgets, and Web services.

The top five items on the list of 28 options strategic IT issues warrant special attention. (scale score for all respondents of 6.0 or higher; scale: 1=not important; 7=very important). First, these data indicate that almost two decades into the much discussed "computer revolution in education," campus officials are still very concerned about "clarifying goals" for campus technology resources (scale score for all respondents: 6.1).

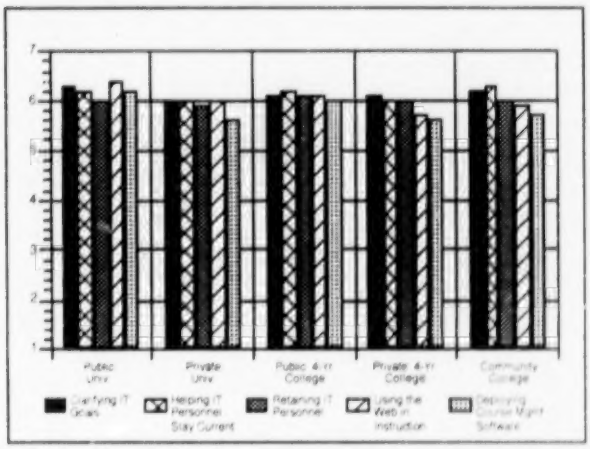

Figure 7: Key Strategic IT Issues, Fall 2001
(scale score: 1=not important, 7=very important)

Second, the 2001 survey data highlight the significant concern about IT personnel training and retention among campus CIOs. Indeed, the high priority respondents assign to personnel issues continue to confirm that many of the key IT challenges in higher education really involve people more than products.

Even with the much-discussed demise of the "dot.coms" in late 2000 and early 2001, there is still unfulfilled demand for individuals with technical talent across all sectors of the US economy.[3] The continuing, widespread demand for IT talent means that campus IT personnel often can "walk across the street" for positions in the for-profit sector and easily increase their income by 30 or 50 percent (or more!). Indeed, these data suggest that despite the current economic downturn, the education community — both higher education and K-12 — remains at great risk of losing its technology talent to the corporate sector.

The 2001 survey data also confirm that staffing issues affect both user support initiatives and campus efforts to assist the instructional integration of technology across all sectors of higher education. Even though institutions spend a large portion of their IT budgets on personnel, colleges and universities remain significantly understaffed in the area of user support.

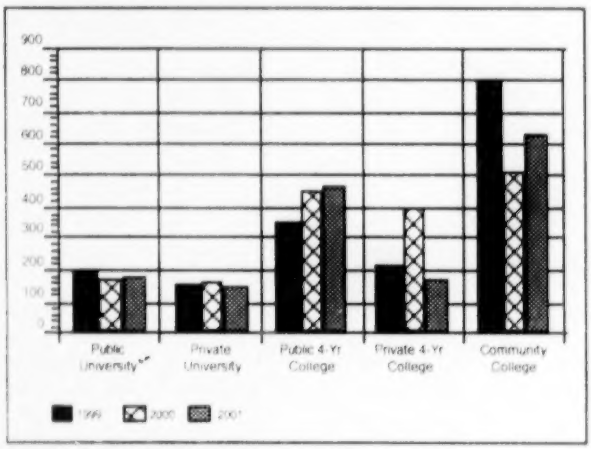

Figure 8: User Support Ratios
(ratio of FTE help desk personnel to headcount enrollment)

The survey data presented in Figure 8 highlight the gap in user support policies and services across all types of colleges and between the technology dependent/technology intensive campus and corporate communities. For example, the widely cited user support guidelines developed by The Gartner Group (www.gartnergroup.com), an IT industry research and consulting organization, generally recommend one IT support person for every 50-75 users. In contrast, the best user support ratios, found in private universities, are roughly twice the level recommended by The Gartner Group; in community colleges the ratios run almost ten times the recommended Gartner Group numbers. Moreover, the numbers shown in Figure 8 actually understate the level of the user support problem as the data are based solely on student headcount enrollments and do

[3] A recent report by the Information Technology Association of America (www.itaa.org) notes that even with the economic downturn underway in 2001, as reflected by the demise of dot.coms and layoffs in other sectors, almost half of the new IT jobs in 2001 will remain vacant: "425,000 positions will go unfilled because of a lack of applicants with the requisite technical and non-technical skills."

not include other campus personnel such as faculty, staff, and administrators.

Technology Planning

The 2001 data highlight the continuing challenge of IT planning in higher education. Almost two-thirds (63.3 percent) of the campus officials participating in the 2001 Campus Computing Survey report that their institution has a strategic plan for information technology, up slightly from 61.0 percent in 1999 and just 48.0 percent in 1998.

At one level, these numbers suggest important and impressive gains in campus efforts to anticipate and to plan for a wide array of critical information technology issues. However, additional data from the 2001 suggest that many of these campus IT plans are often incomplete.

Indeed, probe just a bit below the surface and it is clear that many of the institutions that claim to have a strategic plan for information technology frequently do not have plans for key components of the overall IT strategic plan. For example, just over half of the 2001 survey respondents (54.4 percent, compared to 52.2 percent in 2000) report that their institution has a financial plan for technology that acknowledges the need to "acquire and retire" aging equipment.

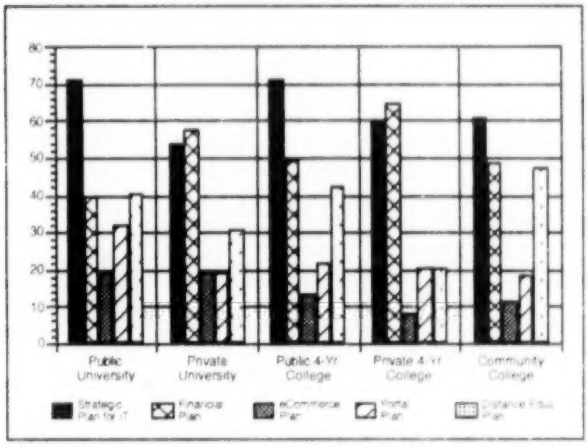

Figure 9: Strategic Planning for Information Technology
(percentages by sector)

Other metrics also to confirm that some campus IT planning efforts may be incomplete. For example, only one-eighth of the campuses participating in the 2001 survey report strategic plans for electronic commerce (11.8 percent, up from 6.8 percent in 2000). A fifth (21.4 percent) report a plan for student portal services (compared to 12.6 percent in 2000). About a third (34.3 percent, up from 29.2 percent last year) report a strategic plan for distance learning initiatives. Although some these metrics show impressive gains from 2000 to 2001, the numbers are still well-below the overall number of institutions reporting that they have a "strategic plan for information technology."

Rising Use of IT in Instruction

Yet even as campuses and campus officials continue to struggle with technology planning, the 2001 survey documents the rising use of technology to support instruction (Figure 10). As shown in Figure 10, almost two-thirds (64.1 percent) of all college courses now utilize electronic mail, up from 59.5 percent in 2000, 54.0 percent in 1999, and 20.1 percent in 1995. Similarly, almost half (47.4 percent) of college courses now use Internet-based resources (for example, listing URLs in the class syllabus), compared to 10.9 percent in 1995, 33.1 percent in 1998 and 42.6 percent in 2000.

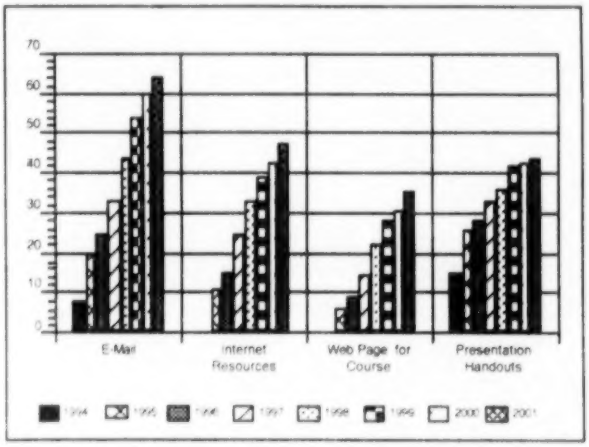

Figure 10: Rising Use of Technology in Instruction
(percentages for all institutions)

The survey data also highlight the growing role of the Web pages for individual classes: over a third (35.2 percent) of all college courses have a Web page, compared to 30.7 percent in 2000, 22.5 percent in 1998 and 9.2 percent in 1996. Concurrently, the 2001 Campus Computing Survey data indicate that one-fourth (25.2 percent) of all college faculty have a personal Web page not linked to a specific class or course, compared to 19.0 percent in 1999.

As in past years, the 2001 survey reveal important variations in the deployment of IT resources across sectors. For example, survey

respondents estimate that almost half (47.1 percent) of all courses in public research universities have an individual Web page for class material and resources, up from 33.7 percent in 1999 and almost five times the level of 10 percent posted in 1995 (Figure 11). In contrast, while the number has also increased by a factor of five over five years in private four-year colleges, it is almost a third below the level in public universities (32.4 percent). The pattern for the use of email as a course resource is similar: large gains within sectors but significant variation across sectors (Figure 12).

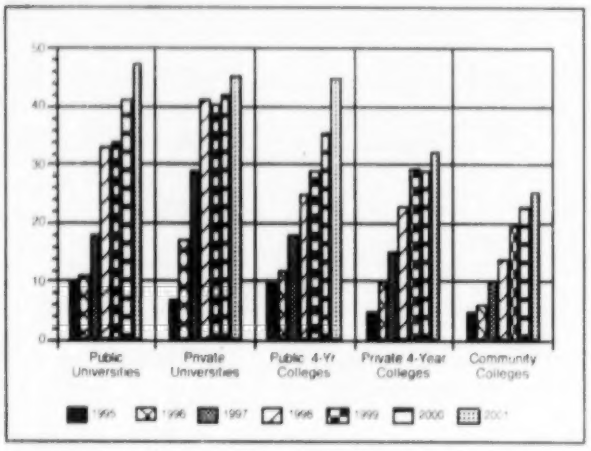

Figure 11: Rising Use of Campus Web Site in Instruction
(percentages by sector, of courses with a Web page, 1995-2001)

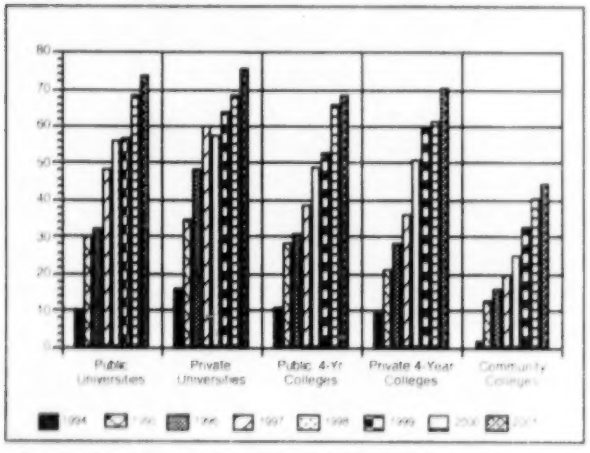

Figure 12: Rising Use of Electronic Mail in Instruction
(percentages by sector, 1994-2001)

Course Management Software

The 2001 survey data highlight the increasingly important role of Course Management Software (CMS) in instruction. As over half of all campuses have already established a single campus standard for CMS products (Figure 13), the 2001 survey data confirm that course management tools have emerged as a core component of the instructional technology infrastructure across all sectors of American higher education.

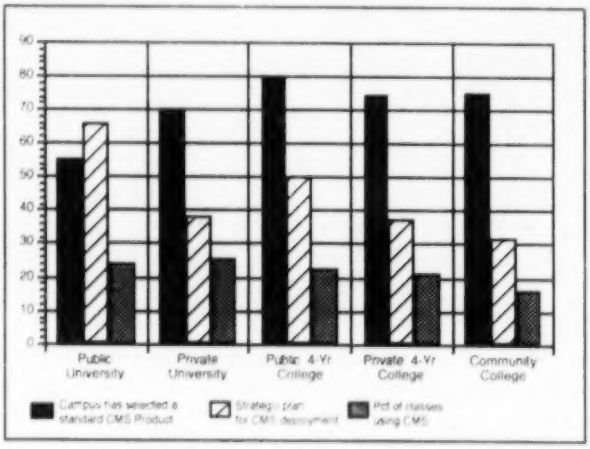

Figure 13: CMS Policies, Deployment Plans, and Utilization
(percentages by sector, 2001)

These numbers may seem low compared to the proportion of classes that use e-mail, presentation handouts, and Web pages (Figure 12). Yet a clear indicator of the growing importance of these CMS products is that almost three-fifths (57.8 percent) of the survey respondents report that their campus has already established a single product standard for course management tools and 41.8 percent report a CMS strategic plan for CMS deployment. In contrast, survey respondents estimate that just one-fifth (20.6 percent) of college courses currently use CMS.

CMS planning and deployment represents a rare example of institutional policy moving ahead of campus practice: rather than support several CMS products or wait for market forces to determine the "winning" application, growing numbers of campus officials and instructional technology committees are selecting a single CMS product for their institutions. These decisions reflect a campus effort to make a clear statement about the role of CMS applications in instruction. Additionally, the movement to early standards should help promote broader and faster deployment and also simplify and facilitate user support services.

Moving Toward Wireless

This year's survey data reveal that wireless networks are an increasingly important issue for all sectors of higher education. One-fourth (24.3 percent) of the campuses report that they have a strategic plan for wireless networks; another third (32.1 percent) report the strategic plan for going wireless is currently in development (Figure 14).

Roughly half (50.6 percent) of the institutions in the 2001 survey report that they have functioning wireless LANs, compared to 29.6 percent in 2000. Another tenth (10.8 percent) report that wireless LANS will become functional this year. Just 6.2 percent of the survey respondents indicate that campus-wide wireless networks are up and running at their institutions as of fall 2001, compared to 3.8 percent in 2000; an equal number (6.6 percent) report that their campuses will be fully wireless during the coming academic year (vs. 3.8 percent in 2000).

Across all sectors, the 2001 data suggest that wireless services cover about a tenth (10.9 percent) of the physical campus at those institutions reporting wireless networks.

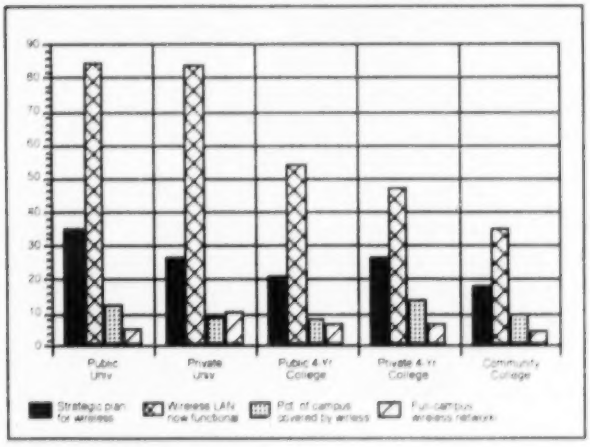

Figure 14: Moving Towards Wireless
(percentages by sector, 1995-2001)

ISP Services

One of the great technology myths in higher education is that "all college students are wired, 24/7." The fact is that only a small proportion of the nation's 15.5 million college students are wired – i.e., have "round the clock" access to high speed networks.

Most institutions, especially four-year colleges and universities, provide their students with campus email accounts and some on-campus access to email and the Web. This applies to both residential as well as off-campus students, full-time and part-time students. However, the majority of American college students do not live in campus facilities. Depending on the college they attend, they may (or may not) receive ISP services as a benefit of college enrollment.

As shown in Figure 15, the 2001 survey reveals great variations across sectors on the issue of off-campus Internet access (i.e., ISP services) for students. Roughly three-fifths (61.3 percent) of public universities and two-fifths (44.0 percent) of private universities provide their students with free off-campus dial-up services. In contrast, more than nine-tenths (90.3 percent) of community colleges, roughly three-fifths (62.5 percent) of private four-year colleges, and almost half (49.6) of public four-year colleges provide no off-campus ISP services for their students.

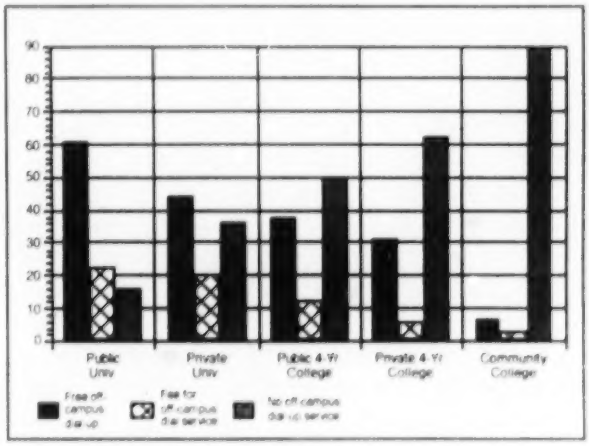

Figure 15: Off-Campus Dial-Up Services for Students
(percentages by sector, 2001)

These data challenge the widely-held notion of "wired" undergraduates. Rather, the 2001 survey data confirm that students in some sectors are far more wired – or have access to the "wire" — than their peers in other kinds of institutions.

The comparatively small number of full-time undergraduates who live in campus dorms fare better than their off-campus peers. The 2001 survey data reveal that the "port to pillow" ratio (i.e., ratio of computer ports to pillows or beds in a college dorm room) approaches 100 percent at most residential colleges and universities. Consequently, residential students typically enjoy the benefits of "24/7" access to high speed campus networks from their college dorm rooms.

However, after the freshman or sophomore year, most undergraduates in public universities and four-year colleges typically migrate to off-campus housing. [4] Once these students move off-campus, they often depend on (low-speed) dial-up telephone connections (copper wire) via modems for off-campus Internet access. Depending on campus policies regarding off-campus dial-up services for students, some will turn to turn to commercial firms (AOL, AT&T, Earthlink, MCI, Mindspring, or cable companies) for their Internet access; the cost for many of these commercial services runs about $275-300 annually, in addition to any additional IT fees imposed by their institutions.

The ISP patterns are somewhat similar for college faculty. Universities and public four-year colleges are far more likely to provide free dial-up services to their faculty than other sectors (Figure 16). In contrast, the majority of community college faculty, like the vast majority of community college students, appear dependent on commercial ISPs for off-campus Internet access.

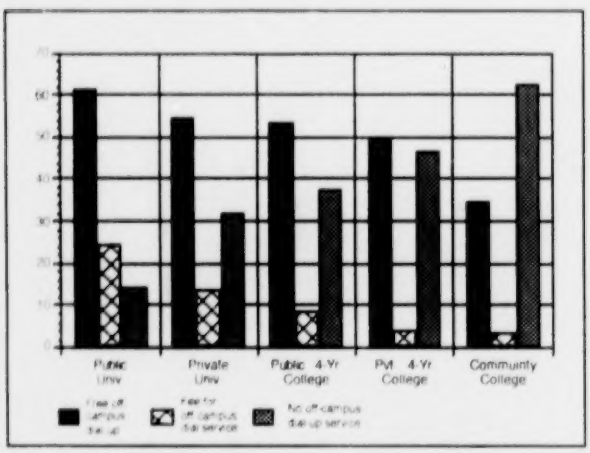

Figure 16: Off-Campus Dial-Up Services for Faculty
(percentages by sector, 2001)

Faculty Recognition and Reward

One of the unfortunate ironies about campus efforts to promote the instructional integration of information technology is the fact that comparatively few campuses provide formal recognition and reward for faculty efforts. Although the most institutions provide some support for faculty to develop instructional applications and many campuses have technology centers to support instructional integration, few institutions recognize faculty IT efforts in the review and promotion process.

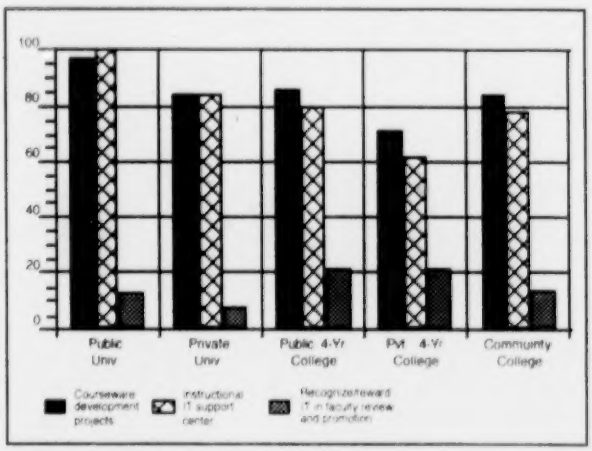

Figure 17: Faculty IT Support vs. Recognition
(percentages by sector, 2001)

As shown in Figure 17, the pattern is fairly consistent across all sectors: institutional support for courseware development projects is common, as is the campus presence of technology support centers to assist faculty with instructional integration. However, comparatively few institutions have a formal program that provides recognition and reward for individual faculty efforts with instructional integration as part of the routine faculty review and promotion process.

[4] Data from UCLA's annual survey of college freshmen reveal that public colleges and universities enroll 65 percent of the roughly 1.635 million first-time, full-time college freshmen enrolled in four-year colleges and universities. Roughly four-fifths of full-time college freshmen in four-year colleges and universities reside in campus housing (campus dorms, fraternity/sorority houses, etc.). L. Sax et. al. *The American Freshmen: National Norms for Fall 1998* (Los Angeles: UCLA, 1998)

	All Insts.	Universities		4-Year Colleges		2-Year Colleges	
		Public	Private	Public	Private	Public	Private
Number of Respondents	590	63	26	120	224	146	11
GENERAL CAMPUS POLICIES ABOUT DESKTOP COMPUTERS							
Does your institution have:							
A formal policy promoting or mandating computers/ technology resources for							
Curriculum utilization?	33.7	35.5	12.0	35.6	31.3	38.6	36.4
Undergraduates?	37.6	36.5	28.0	37.6	39.1	38.0	30.0
Graduate/Professional students?	18.4	32.8	24.0	23.5	17.6	6.5	-
Distance education?	31.3	29.0	20.0	38.7	21.5	43.2	20.0
A computer instruction, computer competency, technology literacy or information literacy requirement for all undergraduates?	42.0	34.4	15.4	49.2	43.7	38.3	81.8
A special computer use/technology fee or annual/term computer use charge for all students?	51.5	68.3	23.1	66.7	41.2	54.2	36.4
Average computer use fee (where charged)	$ 229	$ 197	$ 197	$ 245	$ 282	$ 164	$ 360
Code of conduct/acceptable use policy for campus e-mail accounts and individual Web pages?	93.2	95.2	96.2	93.3	96.3	88.7	72.7
Operating systems recommended/supported*							
Mac OS 9 or earlier	61.5	77.8	80.8	76.7	63.8	37.7	27.3
Mac OS X	41.0	68.3	57.7	49.2	35.7	28.8	27.3
UNIX	53.7	87.3	65.4	65.0	48.7	39.0	9.1
Linux	39.8	63.5	57.7	43.3	40.2	26.0	-
Windows 95/98/ME	88.5	88.9	88.5	85.8	87.9	90.4	100.0
Windows NT Workstation	70.7	85.7	76.9	85.8	63.8	61.6	63.6
Windows 2000	83.2	88.9	88.5	84.2	83.0	80.8	63.6
Windows XP	13.9	39.7	19.2	15.0	9.8	6.8	18.2
Open VMS	20.0	20.6	19.2	26.7	21.4	13.0	9.1
Novell	42.2	46.0	46.2	42.5	35.7	50.7	27.3
None	2.2	9.5	3.8	1.7	0.9	1.4	-
Do you require or strongly recommend computer ownership for							
All students							
No	59.2	55.7	38.5	60.8	43.8	87.4	54.6
Recommend	37.4	41.0	53.9	34.2	52.7	11.9	36.4
Require	3.4	3.3	7.7	5.0	3.6	0.7	9.1
Students in specific disciplines or programs							
No	50.2	26.2	16.0	45.1	47.5	72.9	77.8
Recommend	38.5	39.3	52.0	50.5	40.5	24.3	22.2
Require	11.4	34.4	32.0	4.5	12.0	2.9	-
Students in individual academic units/prof. programs							
No	52.4	18.0	8.0	49.6	49.8	79.4	77.8
Recommend	36.1	37.7	64.0	43.2	41.7	17.7	22.2
Require	11.5	44.3	28.0	7.2	8.5	2.8	-
Does your institution recommend a particular brand/product for*							
Hardware							
students?	35.7	33.3	61.5	30.0	45.5	21.0	45.5
faculty?	72.1	52.4	76.9	78.3	79.8	62.5	72.7
administrators/staff?	74.8	58.7	73.1	80.8	83.4	63.2	81.8
Software							
students?	61.6	44.4	73.1	62.1	77.9	40.3	70.0
faculty?	80.5	57.1	76.9	84.6	90.1	73.6	72.7
administrators/staff?	83.4	66.7	80.8	87.2	91.0	76.4	81.8
Brands/kinds recommended by your institution*							
Apple/Macintosh							
iMacs	30.5	31.7	50.0	39.2	34.4	14.4	18.2
G-4 desktop computers	44.7	49.2	61.5	62.5	42.9	28.8	36.4
iBooks	19.5	30.2	38.5	19.2	24.1	5.5	9.1
PowerBooks	23.2	33.3	50.0	30.0	25.0	6.8	9.1
Windows Compatibles							
Pentium III class desktops/notebooks	70.3	55.6	69.2	71.7	79.9	61.6	63.6
Pentium Celeron desktops/notebooks	22.9	25.4	26.9	22.5	28.1	13.7	18.2
Pentium IV class desktops/notebooks	49.3	61.9	80.8	56.7	47.8	36.3	27.3
Unix/Linux Systems							
Compaq	15.8	28.6	38.5	12.5	15.2	11.0	-
IBM	12.9	34.9	38.5	9.2	9.4	6.8	18.2
Sun	23.9	50.8	57.7	35.0	17.9	8.2	-
Dell	24.9	49.2	46.2	26.7	21.9	15.1	9.1
Silicon Graphics	8.3	25.4	23.1	12.5	5.4	-	-
HP	10.2	17.5	23.1	7.5	9.8	8.2	-
Other	6.4	7.9	15.4	6.7	5.4	6.2	-

Percentages by campus category

**Columns may total more than 100% since responses were not mutually exclusive*

	All Insts.	Universities Public	Universities Private	4-Year Colleges Public	4-Year Colleges Private	2-Year Colleges Public	2-Year Colleges Private
USES OF INFORMATION TECHNOLOGY							
How strongly do you agree or strongly agree:*							
Faculty have unreasonable expectations about user support	52.5	44.4	61.5	51.7	53.9	52.8	54.5
Technology has improved instruction on my campus	84.9	84.1	80.8	92.5	80.7	86.1	81.8
We plan to require all students to own a computer by Fall 2003	12.5	12.7	11.5	14.3	18.7	0.7	27.3
Access to Internet 2 by Fall 2002 is essential to long-term needs	30.5	84.1	65.4	35.8	16.1	18.2	27.3
Colleges should permit commercial advertising on campus web sites/portals	16.7	14.8	19.2	18.5	13.4	21.7	-
Our adm. systems provide effective support for conducting college business	77.1	66.1	80.8	77.3	77.1	80.6	81.8
My campus does a good job of planning our short- and mid- range tech. needs	73.5	71.4	57.7	77.3	74.8	72.9	63.6
The single most important IT issue over the next 2 or 3 years is:							
Provide online/distance education via the web	8.4	5.1	-	10.2	7.0	12.7	-
Providing adequate user support	15.4	11.9	11.5	20.3	15.8	14.1	-
Assist faculty integrate technology into instruction	31.5	35.6	38.5	21.2	38.1	26.1	45.5
Financing replacement of aging hardware/software	11.7	5.1	19.2	11.0	10.7	14.1	27.3
Moving toward campus-wide wireless networks	0.5	1.7	-	0.9	0.5	-	-
Integrating academic and administrative computing	2.6	5.1	3.9	3.4	0.5	4.2	-
Providing student portal services	4.2	6.8	7.7	5.1	4.2	2.1	-
Integrating eCommerce into campus services	1.9	5.1	-	2.5	0.9	1.4	9.1
Hiring/retaining qualified IT staff	11.0	3.4	7.7	11.9	12.6	12.0	9.1
Upgrading/replacing administrative IT/ERP systems	12.6	20.3	11.5	13.6	9.8	13.4	9.1

Means by campus category for percentaged of respondents who "agree/strongly agree"
**Scale from 1="Strongly Disagree" to 4="Strongly Agree"*

HARDWARE AND SOFTWARE RESALE POLICIES AND PROGRAMS							
Does your institution have pricing or resale agreement with							
Hardware vendors?	45.6	11.7	-	40.4	46.6	69.6	90.0
No	0.8	3.3	-	0.9	0.5	-	-
No, sell through on-campus facility	20.3	41.7	34.8	23.9	16.7	12.0	-
Yes, sold through bookstore	8.9	20.0	21.7	10.1	8.8	0.8	-
Yes, sold through entity not affiliated with bookstore	10.2	13.3	13.0	8.3	11.3	8.0	10.0
Yes, sold by an off-campus dealer	14.3	10.0	30.4	16.5	16.2	9.6	-
Yes, sold online with one or more vendors							
Software vendors?	40.3	11.9	3.9	27.3	47.1	58.3	80.0
No	2.5	3.4	-	5.5	1.6	1.5	-
No, sell through on-campus facility	31.5	54.2	42.3	30.9	30.0	24.2	-
Yes, sold through bookstore	12.0	27.1	23.1	19.1	9.1	2.3	-
Yes, sold through entity not affiliated with bookstore	8.4	3.4	7.7	12.7	8.6	6.1	20.0
Yes, sold by an off-campus dealer	5.3	-	23.1	4.6	3.7	7.6	-
Yes, sold online with one or more vendors							
Does your institution require computer buyers to purchase software as part of the	81.3	75.9	57.7	79.7	76.4	96.2	100.0
No	13.9	22.4	30.8	15.0	16.4	3.1	-
Strongly encouraged	4.8	1.7	11.5	5.3	7.2	0.8	-
Required							
Does your institution have a written policy regarding duplication of copywrited	4.2	1.6	-	2.5	4.1	7.1	10.0
No	6.3	-	7.7	8.3	5.5	7.1	20.0
No, but under development	89.6	98.4	92.3	89.2	90.4	85.7	70.0
Yes							

Percentages by campus category

BEST COPY AVAILABLE

	All Insts.	Universities Public	Universities Private	4-Year Colleges Public	4-Year Colleges Private	2-Year Colleges Public	2-Year Colleges Private
CURRENT IT/COMPUTER FACILITIES AND RESOURCES							
Headcount enrollment on campus as of Spring 2001	8,183	22,012	12,800	9,160	2,507	9,663	1,235
Number of institution owned desktop or notebook computers and workstations	2,410	8,891	5,956	2,135	903	1,723	404
Number of institution owned Unix workstations	151	811	441	75	27	12	0
Number of personally owned desktop computers	1,881	9,480	5,446	1,140	972	311	103
Proportion of individuals who own desktop or notebook computers							
Students							
Desktops	55.7	64.5	62.3	56.4	58.3	45.9	41.8
Notebooks	15.8	19.4	22.2	11.7	20.1	8.3	17.9
Faculty							
Desktops	76.3	82.6	78.1	80.3	75.8	71.9	58.2
Notebooks	16.6	19.6	20.2	15.0	17.7	13.3	21.7
Number of desktop/notebook computers purchased by:							
2000-01							
Students	855	2,817	1,773	937	466	208	56
Faculty	172	577	642	180	94	63	13
Administrators/staff	186	611	908	157	98	90	14
Campus labs, clusters & other instructional use	208	490	355	241	110	206	38
2001-02							
Students	955	3,128.8	1,774.7	1,110.6	526.0	237.4	79.2
Faculty	167	566.5	522.1	183.4	99.2	58.5	15.7
Administrators/staff	187	700.5	851.5	154.2	99.4	82.8	18.6
Campus labs, clusters & other instructional use	209	487.7	411.5	246.9	120.3	183.8	36.4
Number of desktop computer labs, clusters and classrooms	51	94.8	96.9	66.9	33.0	38.9	30.5
How many dedicated to departments or units?	23	44.9	39.2	35.8	12.1	19.6	4.4
Number of desktop computers/workstations in all labs/classrooms/clusters							
Computers	646	1,472	849	721	297	750	355
Unix Workstations	40	151	119	29	18	8	-
Number of network servers	72	357	221	55	25	27	7
Percentage of operating systems installed on institutionally-owned computers and servers							
Computers/clients							
Mac	12.3	11.7	15.7	12.9	14.5	7.2	13.8
Win 95/98/2000	71.0	62.2	62.7	69.0	69.8	80.5	66.5
Win NT	18.8	17.6	21.3	17.8	20.6	17.0	21.2
Unix	3.5	6.6	7.1	3.5	2.7	1.3	-
Linux	2.6	4.4	3.9	2.1	2.2	2.6	0.8
Network servers							
Mac	4.8	4.4	4.6	3.5	6.1	3.2	24.3
Win NT	42.0	31.3	36.5	42.0	44.7	42.7	55.4
Win 2000 Server	23.6	14.6	21.0	21.6	25.3	27.1	36.8
Unix	17.4	24.2	32.5	16.9	17.7	9.0	0.5
Linux	10.1	7.7	7.3	9.8	13.7	5.9	-
Novell	28.5	22.8	23.3	24.1	24.4	42.6	2.0
FTE of IT help desk/technical support personnel	30.3	125.4	88.2	19.8	14.5	15.3	21.5
Ratio user support (enrollment/help desk)	270.1	175.5	145.1	462.6	172.9	631.6	57.4
Percentage of faculty with individual/personal Web page	25.2	33.7	35.3	29.4	25.3	17.6	12.9
Percentage of classes that use:							
Computer-based classrooms/labs	28.2	29.3	16.0	30.1	25.8	33.0	20.9
Computer simulations	17.4	17.5	11.0	20.3	16.0	18.5	16.1
Presentation handouts	43.8	42.4	53.1	48.4	42.9	40.3	41.1
Electronic mail	64.1	73.7	75.7	68.1	70.4	44.3	56.5
Commercial courseware/instructional resources	20.3	16.6	24.5	21.4	20.6	19.4	26.5
Internet resources	47.4	52.4	52.9	52.7	49.5	37.1	35.0
Course management tools for online course resources	20.6	24.0	25.5	22.9	20.8	16.8	9.5
Web pages for class materials and resources	35.2	47.1	45.7	44.7	32.4	25.2	20.0

Means by campus category

	All Insts.	Universities		4-Year Colleges		2-Year Colleges	
		Public	Private	Public	Private	Public	Private
ACADEMIC & INSTRUCTIONAL COMPUTING POLICIES AND PROCEDURES (Continued)							
What academic resources/services are on your Web site?*							
Undergraduate admissions applications	86.6	98.4	100.0	91.7	90.2	70.5	72.7
Financial aid application	55.9	85.7	73.1	62.5	46.9	51.4	18.2
Current course catalog	88.8	100.0	96.2	94.2	84.4	84.9	90.9
Program/major/degree requirements	80.0	90.5	80.8	87.5	78.6	71.9	72.7
Course registration	55.4	79.4	88.5	72.5	37.9	55.5	9.1
Course add/drop options	45.1	74.6	73.1	64.2	28.6	40.4	-
E-commerce (fee payments, etc.)	27.6	49.2	42.3	41.7	17.9	20.5	9.1
On-line courses (i.e., full course online)	59.8	84.1	53.8	83.3	33.5	74.0	27.3
Library/card catalog	86.4	96.8	100.0	93.3	85.3	78.1	54.5
Interlibrary loan services	64.9	93.7	84.6	77.5	66.5	40.4	9.1
Journals and reference resources	73.2	95.2	88.5	86.7	76.8	48.6	18.2
Course reserves	38.3	79.4	69.2	44.2	40.2	8.9	18.2
Student transcripts	42.0	69.8	69.2	50.8	33.5	34.2	-
IT support resources	66.8	90.5	88.5	83.3	69.6	37.7	27.3
IT training/tutorials	50.7	79.4	88.5	68.3	47.3	25.3	9.1
Instructional software	41.9	81.0	69.2	64.2	32.6	18.5	9.1
Faculty/staff directory	88.6	98.4	92.3	95.0	87.9	82.9	45.5
Student newspaper	42.5	84.1	80.8	53.3	37.9	17.8	18.2
Student handbook	51.5	85.7	73.1	53.3	51.3	33.6	27.3
Athletic event schedule	76.3	96.8	88.5	86.7	84.8	47.3	27.3
Alumni information/services	69.5	95.2	92.3	75.0	82.6	31.5	45.5
Press releases/media services	70.5	93.7	96.2	81.7	77.2	40.4	18.2
Campus book store	58.6	87.3	73.1	67.5	57.1	43.2	-
Personalized student calendar	19.0	27.0	23.1	18.3	19.6	15.8	-

Percentages by campus category
**Columns may not total 100% since responses are not mutually exclusive*

FUTURE ISSUES AFFECTING CAMPUS COMPUTING							
How important are the following to campus computing and IT planning over the next 2-3 years?							
Operating system/interface/development							
Windows 95/98/ME	3.4	3.2	2.9	3.6	3.5	3.5	4.0
Windows NT Server	4.0	4.0	3.6	4.3	4.1	3.8	4.3
Windows 2000 Desktop	5.6	5.5	5.6	5.8	5.5	5.5	5.8
Windows 2000 Server	5.5	5.3	5.6	5.7	5.5	5.4	5.9
Windows XP	4.6	4.9	5.2	4.7	4.5	4.5	4.7
Macintosh OS X	3.6	3.8	4.1	4.0	3.6	3.3	2.7
Macintosh OS X server	2.8	3.4	3.1	3.3	2.7	2.3	2.5
Solaris	3.1	5.0	4.8	3.6	2.7	2.2	1.1
Unix	4.2	5.5	5.2	4.3	4.1	3.8	1.6
Linux (desktop/client)	3.3	4.7	4.5	3.5	3.2	2.7	1.6
Linux (server)	3.9	5.3	4.7	3.9	3.8	3.3	1.8
Hardware							
Notebook computers	5.6	5.9	5.8	5.7	5.6	5.2	5.3
Macintosh computers	3.5	3.9	4.1	3.9	3.4	3.1	3.0
Unix workstations	3.1	4.6	4.2	3.4	2.9	2.4	1.5
Network computers	3.5	3.3	2.8	3.4	3.2	4.2	4.4
PDAs/handheld computers	4.2	5.1	4.9	4.3	4.0	3.9	3.8
Smart Cards	4.0	4.6	4.3	4.0	3.9	3.8	3.8
DVD	4.3	4.5	4.3	4.2	4.4	4.1	4.0
Instructional applications and resources							
Developing instructional software	4.7	5.3	5.5	5.0	4.3	4.7	4.6
Using instructional software in classes	5.9	6.1	6.0	6.2	5.7	5.8	5.7
Using instructional software as a supplement to class	6.0	6.3	6.2	6.2	5.9	5.9	5.9
Computer-based classroom presentation facilities	6.1	6.4	6.1	6.2	6.1	6.0	5.2
Internet resources for instruction	6.2	6.5	6.2	6.3	6.1	6.3	6.1
Web pages for classes	5.9	6.3	6.3	6.1	5.7	5.8	6.2
Web-based tutorials	5.4	5.8	5.3	5.6	5.0	5.5	5.7
e-Books (e-Textbooks)	4.2	4.3	4.6	4.4	3.9	4.2	4.7

Mean ratings by campus category
Scale from 1="Not Important" to 7="Very Important"

	All Insts.	Universities		4-Year Colleges		2-Year Colleges	
		Public	Private	Public	Private	Public	Private
FUTURE ISSUES AFFECTING CAMPUS COMPUTING (Continued)							
Networking & Internet/WWW issues & resources							
Merging data & telecommunications networks	50	58	54	50	47	52	50
Wireless networks	54	59	59	56	53	50	50
Voice over IP	44	52	50	46	41	45	46
Bluetooth	31	38	37	32	29	29	28
Lotus Notes	17	21	17	18	16	18	15
Microsoft Exchange	40	40	32	40	40	41	48
Java	48	53	52	48	47	46	45
XML	47	55	57	48	45	46	43
Shockwave	39	43	40	40	38	38	45
Quicktime	42	44	43	43	42	38	43
Real Player	45	49	51	47	43	41	44
Microsoft Media Player	44	48	43	46	42	43	50
Gigabit Ethernet	58	62	65	59	56	56	53
ATM	34	39	25	39	29	37	39
Adobe Acrobat	53	53	54	54	52	52	54
Microsoft Reader	35	37	37	36	32	37	40
Internet 2	44	60	56	47	39	39	49
Internet videoconferencing	51	60	57	55	46	52	51
Network security	66	67	68	66	65	65	63
E-commerce on the Web	51	57	55	54	48	50	48
Open source software	42	51	51	43	40	37	39
Student portal services	52	60	60	54	50	49	48
IMS standards	44	52	49	45	40	43	41
Course management software	58	63	59	59	57	56	48
User Support Services/Campus IT Services							
On-line IT training	50	53	52	51	48	50	51
On-line technical support	54	57	54	55	52	55	50
Advertising on the student portal site	28	30	33	30	25	30	31
Computer repair services	46	41	45	48	44	52	47
Alumni services via the campus web site	47	49	56	48	52	36	51

Mean ratings by campus category
Scale from 1="Not Important" to 7="Very Important"

RATING THE TECHNOLOGY INFRASTRUCTURE							
Computer networks and data communication	58	61	58	60	58	56	53
Telecommunications and phone system	52	58	55	55	52	48	47
Wireless networks	35	38	40	33	35	33	30
User support services	51	50	47	52	52	50	46
On-line reference resources in campus library/library system	55	57	52	57	55	53	46
Web resources to support instruction	48	53	47	51	47	47	39
E-commerce capacity	32	37	34	35	29	32	22
Campus web site services/student portal	41	44	42	42	39	40	32
Network security against hackers and virus attacks	48	49	47	50	50	45	46
IT training for faculty	45	46	42	47	45	43	43
IT training for students	41	43	39	41	40	42	44

Mean rating by campus category
Scale from 1="Poor" to 7="Excellent"

	All Insts.	Universities		4-Year Colleges		2-Year Colleges	
		Public	Private	Public	Private	Public	Private
ADDRESSING BUDGET ISSUES BY:							
Reducing purchases of computer technology							
Doing this already	14.4	16.1	-	12.8	16.9	14.9	-
Beginning in 2001-02	5.0	-	3.9	0.9	6.9	7.8	9.1
Reviewing for 2001-02	11.8	11.3	-	12.8	11.0	14.9	9.1
Decided not to do	68.8	72.6	96.2	73.5	65.3	62.4	81.8
Charging fees to departments and service units							
Doing this already	19.8	50.8	38.5	26.5	11.1	10.9	9.1
Beginning in 2001-02	2.1	3.2	-	2.6	1.9	2.2	-
Reviewing for 2001-02	14.2	19.1	11.5	15.4	14.4	10.9	18.2
Decided not to do	63.9	27.0	50.0	55.6	72.7	76.1	72.7
Requiring a computer/IT fee for all students							
Doing this already	48.4	66.1	26.9	61.0	40.9	47.1	27.3
Beginning in 2001-02	1.8	1.6	-	0.9	2.3	2.2	-
Reviewing for 2001-02	12.5	16.1	11.5	15.3	11.2	9.4	27.3
Decided not to do	37.4	16.1	61.5	22.9	45.6	41.3	45.5
Leasing rather than buying hardware							
Doing this already	19.4	19.7	16.0	12.0	26.8	13.3	36.4
Beginning in 2001-02	3.0	-	4.0	1.7	4.2	3.7	-
Reviewing for 2001-02	16.6	19.7	20.0	16.2	14.6	17.8	18.2
Decided not to do	61.0	60.7	60.0	70.1	54.5	65.2	45.5
More active recycling of older equipment							
Doing this already	77.6	79.0	76.0	79.7	74.2	78.9	100.0
Beginning in 2001-02	2.3	-	4.0	1.7	2.7	2.8	-
Reviewing for 2001-02	4.5	6.5	-	4.2	5.4	3.5	-
Decided not to do	15.7	14.5	20.0	14.4	17.7	14.8	-
Vendor financing							
Doing this already	15.8	23.8	23.1	11.3	17.8	10.7	27.3
Beginning in 2001-02	1.4	1.6	3.9	0.9	1.4	1.4	-
Reviewing for 2001-02	10.4	9.5	11.5	10.4	11.2	8.6	18.2
Decided not to do	72.4	65.1	61.5	77.4	69.6	79.3	54.6
Reducing hours in public access facilities							
Doing this already	8.0	7.9	4.0	8.6	7.0	9.9	9.1
Beginning in 2001-02	1.1	1.6	-	0.9	0.9	1.4	-
Reviewing for 2001-02	5.1	6.4	4.0	4.3	3.7	6.4	18.2
Decided not to do	85.8	84.1	92.0	86.3	88.4	82.3	72.7
Reducing services							
Doing this already	10.5	14.5	4.0	9.3	8.9	12.6	18.2
Beginning in 2001-02	1.4	1.6	-	-	1.4	3.0	-
Reviewing for 2001-02	9.4	14.5	12.0	5.9	8.0	11.9	9.1
Decided not to do	78.7	69.4	84.0	84.8	81.7	72.6	72.7
Reorganizing operations							
Doing this already	43.2	73.0	61.5	44.4	39.3	32.6	27.3
Beginning in 2001-02	7.5	-	11.5	10.3	7.3	7.1	18.2
Reviewing for 2001-02	16.3	17.5	7.7	18.0	12.3	22.0	18.2
Decided not to do	33.1	9.5	19.2	27.4	41.1	38.3	36.4
Reducing staff							
Doing this already	9.1	23.0	8.3	6.3	6.9	9.0	9.1
Beginning in 2001-02	2.9	1.6	4.2	1.8	3.2	2.2	18.2
Reviewing for 2001-02	5.6	13.1	-	4.5	3.7	6.0	18.2
Decided not to do	82.4	62.3	87.5	87.5	86.1	82.8	54.6
Using information technology to reduce instructional costs							
Doing this already	28.8	34.5	20.0	44.3	22.5	25.0	27.3
Beginning in 2001-02	3.3	5.2	-	2.7	2.4	5.2	-
Reviewing for 2001-02	24.1	24.1	20.0	27.4	20.1	28.7	18.2
Decided not to do	43.8	36.2	60.0	25.7	55.0	41.2	54.6

Percentages by campus category

	All Insts.	Universities		4-Year Colleges		2-Year Colleges	
		Public	Private	Public	Private	Public	Private
ADDRESSING BUDGET ISSUES BY: (Continued)							
Making greater use of student assistants							
Doing this already	75.8	86.9	76.0	86.3	74.8	64.8	63.6
Beginning in 2000-01	5.0	4.9	-	1.7	8.1	4.2	-
Reviewing for 2000-01	6.9	4.9	12.0	1.7	6.8	11.3	9.1
Decided not to do	12.3	3.3	12.0	10.3	10.4	19.7	27.3
Outsourcing Internet access to commercial providers							
Doing this already	29.5	35.5	30.8	25.6	30.3	28.0	36.4
Beginning in 2000-01	1.6	1.6	-	1.7	1.8	1.4	-
Reviewing for 2000-01	8.5	12.9	15.4	7.7	8.6	5.6	9.1
Decided not to do	60.5	50.0	53.9	65.0	59.3	65.0	54.6
Outsourcing computing services to commercial providers							
Doing this already	10.8	8.1	11.5	7.7	9.7	15.5	18.2
Beginning in 2000-01	1.0	1.6	-	0.9	1.4	-	9.1
Reviewing for 2000-01	9.7	14.5	11.5	8.6	10.6	7.0	9.1
Decided not to do	78.4	75.8	76.9	82.9	78.3	77.5	63.6
Outsourcing student portal services to commercial providers							
Doing this already	8.1	3.2	-	5.1	10.5	10.5	9.1
Beginning in 2000-01	3.3	1.6	-	1.7	3.7	4.9	9.1
Reviewing for 2000-01	18.7	24.2	11.5	18.0	20.1	14.7	36.4
Decided not to do	69.9	71.0	88.5	75.2	65.8	69.9	45.5

Percentages by campus category

STRATEGIC, BUDGET AND PERSONNEL ISSUES*							
Assessing benefits of current investment	5.5	5.3	5.5	5.6	5.5	5.5	5.7
Clarifying goals and campus plans for technology resources	6.1	6.3	6.0	6.1	6.1	6.2	6.2
Providing incentives for faculty to use technology	5.1	5.4	4.8	5.2	4.9	5.0	4.8
Allocating funds to support expanded services	5.6	6.0	5.8	5.6	5.5	5.7	5.5
Faculty concerns about benefits of computing in the curriculum	4.9	4.9	4.8	4.8	5.0	4.9	5.4
Administrative concerns about benefits of computing in the curriculum	4.7	4.5	4.6	4.5	4.8	4.7	5.6
Developing/strengthening vendor relationships	4.6	5.0	4.9	4.5	4.5	4.6	4.6
Charging fees to students for computer/network access	4.1	4.7	3.2	4.7	3.6	4.2	4.2
Establishing/maintaining campus-wide hardware standards	5.5	4.8	5.2	5.5	5.6	5.7	5.5
Establishing/maintaining campus-wide software standards	5.7	5.2	5.8	5.7	5.8	5.8	5.7
Operating a computer resale program	2.9	3.3	3.8	3.1	2.7	2.7	3.2
Developing budget model to replace aging equipment	6.0	6.1	5.8	5.8	5.9	6.1	6.1
Using Internet/Web resources in instruction	5.9	6.4	6.0	6.1	5.7	5.9	5.6
Using technology based commercial curriculum products	4.8	4.7	4.8	4.8	4.7	5.0	5.2
Using IT to enhance distance education program	5.1	6.1	5.2	5.7	4.0	5.9	4.8
Negotiating site licensing with textbook publishers	4.0	4.3	4.2	4.1	3.6	4.5	4.1
Negotiating site licensing with academic publishers	4.1	4.6	4.4	4.1	3.8	4.5	4.1
Sharing digital resources with other campuses/institutions	4.6	5.4	4.8	5.0	4.1	4.7	5.0
Developing campus policies for Web-based intellectual property	5.3	5.8	5.5	5.5	5.1	5.1	5.1
Helping IT personnel stay current with new technologies	6.2	6.2	6.0	6.2	6.0	6.3	6.1
Retaining current IT personnel, given off-campus competition	6.0	6.2	5.9	6.1	6.0	6.0	5.7
Electronic commerce	4.7	5.2	5.4	4.9	4.4	4.8	3.8
Web-based instructional/course management systems	5.8	6.2	5.6	6.0	5.6	5.7	5.2
Acquiring IT resources via corporate grants from key vendors	4.9	5.1	4.7	5.0	4.7	4.9	5.2
Providing a "campus portal" for Web-based student services	5.3	6.1	6.0	5.5	5.2	5.0	4.5
Moving more of our user support services to the Web	5.4	6.1	5.7	5.5	5.1	5.5	4.8
Surveying student and faculty about IT issues and services	5.2	5.5	5.3	5.3	5.1	5.1	5.2
Deploying CRM software	3.8	4.0	4.3	3.8	3.6	3.9	3.4

Mean ratings by campus category
Scale from 1="Not Important" to 7="Very Important"

BEST COPY AVAILABLE

	All Insts.	Universities		4-Year Colleges		2-Year Colleges	
		Public	Private	Public	Private	Public	Private
THIS YEAR'S COMPUTING BUDGET COMPARED TO LAST YEAR'S							
Total academic computing budget							
Reduced >5%	7.7	6.6	-	4.2	6.9	14.2	-
Reduced 3-5%	3.7	3.3	-	4.2	4.1	3.6	-
Reduced 1-3%	6.6	18.0	8.0	5.9	1.8	9.9	-
No change	32.5	24.6	24.0	44.1	28.9	34.0	20.0
Increased 1-3%	24.1	24.6	32.0	20.3	26.6	19.9	50.0
Increased 3-5%	13.8	13.1	32.0	13.6	14.7	10.6	-
Increased >5%	11.7	9.8	4.0	7.6	17.0	7.8	30.0
Total administrative computing budget							
Reduced >5%	7.0	8.3	3.9	3.5	6.9	10.8	-
Reduced 3-5%	4.8	3.3	3.9	6.9	4.1	5.0	-
Reduced 1-3%	6.5	15.0	7.7	6.9	2.3	9.4	-
No change	32.9	28.3	26.9	37.1	33.0	33.1	20.0
Increased 1-3%	23.0	21.7	19.2	17.2	24.3	25.2	50.0
Increased 3-5%	13.9	16.7	26.9	10.3	15.6	10.8	10.0
Increased >5%	12.0	6.7	11.5	18.1	13.8	5.8	20.0
Purchases of computers by academic computing units							
Reduced >5%	8.6	6.8	-	5.1	8.8	14.3	-
Reduced 3-5%	3.2	1.7	-	3.4	2.8	4.3	10.0
Reduced 1-3%	5.6	10.2	4.0	4.2	2.3	10.7	-
No change	43.0	40.7	32.0	50.0	44.4	37.9	40.0
Increased 1-3%	20.4	20.3	40.0	22.0	21.8	12.9	30.0
Increased 3-5%	10.0	13.6	8.0	8.5	8.8	12.1	10.0
Increased >5%	9.2	6.8	16.0	6.8	11.1	7.9	10.0
Purchases of computers by administrative computing units							
Reduced >5%	9.1	5.1	-	4.2	9.7	16.3	-
Reduced 3-5%	3.3	1.7	-	2.5	4.2	3.6	10.0
Reduced 1-3%	6.8	15.3	3.9	5.1	3.2	11.4	-
No change	48.9	49.2	50.0	52.5	48.4	46.8	40.0
Increased 1-3%	19.4	13.6	26.9	24.6	22.1	10.6	40.0
Increased 3-5%	6.5	11.9	11.5	4.2	5.1	7.8	-
Increased >5%	6.0	3.4	7.7	6.8	7.4	3.6	10.0
All institutional purchases of desktop/notebook computers							
Reduced >5%	7.7	3.3	-	4.2	8.3	13.6	-
Reduced 3-5%	3.7	1.7	-	3.4	2.8	7.1	-
Reduced 1-3%	6.8	10.0	4.0	4.2	3.2	13.6	10.0
No change	38.0	41.7	44.0	46.2	35.0	33.6	30.0
Increased 1-3%	22.9	25.0	24.0	22.7	26.3	15.7	40.0
Increased 3-5%	10.7	8.3	20.0	10.1	11.5	9.3	10.0
Increased >5%	10.2	10.0	8.0	9.2	12.9	7.1	10.0
Network servers							
Reduced >5%	4.6	5.0	-	3.4	3.3	8.5	-
Reduced 3-5%	1.8	1.7	-	1.7	0.9	3.6	-
Reduced 1-3%	4.8	13.3	7.7	2.5	2.3	6.4	-
No change	38.0	31.7	26.9	44.9	35.1	40.4	50.0
Increased 1-3%	27.1	35.0	19.2	29.7	28.5	20.6	30.0
Increased 3-5%	14.6	10.0	30.8	11.9	18.2	11.4	-
Increased >5%	9.3	3.3	15.4	5.9	11.7	9.2	20.0
Server software and related services							
Reduced >5%	3.7	1.7	-	2.5	2.3	8.5	-
Reduced 3-5%	1.6	3.3	-	1.7	0.9	2.1	-
Reduced 1-3%	3.7	10.0	7.7	1.7	1.9	5.0	-
No change	38.1	33.3	23.1	48.7	33.8	40.4	40.0
Increased 1-3%	29.0	35.0	34.6	26.9	31.9	22.0	40.0
Increased 3-5%	13.8	10.0	23.1	10.9	16.7	12.8	-
Increased >5%	10.1	6.7	11.5	7.6	12.5	9.2	20.0
User training and support							
Reduced >5%	3.8	3.3	-	2.5	3.2	6.4	10.0
Reduced 3-5%	1.4	-	-	2.5	1.8	0.7	-
Reduced 1-3%	5.4	9.8	19.2	0.9	3.2	8.5	-
No change	44.3	47.5	30.8	50.9	42.4	42.6	50.0
Increased 1-3%	24.3	21.3	23.1	19.5	26.7	25.5	30.0
Increased 3-5%	11.9	14.8	19.2	13.6	11.1	9.9	-
Increased >5%	8.9	3.3	7.7	10.2	11.5	6.4	10.0

Percentages by campus category

	All Insts.	Universities Public	Universities Private	4-Year Colleges Public	4-Year Colleges Private	2-Year Colleges Public	2-Year Colleges Private
THE TECHNOLOGY BUDGET							
Pct. of institutions experiencing budget cut in computing, 2000-01	80	131	38	84	100	35	-
Percentage of budget that was cut	103	43	100	72	124	175	
Total academic computing budget 2001-02 (in thousands $$)	2,448	7,626	3,839	2,358	1,770	1,408	228
Percent of budget allocated to:							
Hardware	27.1	17.4	17.1	23.0	30.8	29.5	40.0
Content licenses	7.8	5.4	8.8	7.0	8.9	7.3	8.6
Software	12.5	12.3	11.8	12.0	13.1	11.9	16.6
User support	18.4	23.6	20.4	20.2	17.0	17.3	8.1
Personnel	44.9	53.7	56.8	51.1	40.0	42.3	27.0
Network service/support	14.2	12.1	10.4	14.0	14.3	16.4	12.6
Note: numbers may not equal 100% because of overlapping budget categories)							
Acadmic Computing as an estimated percentage of total campus IT spending	43.4	35.4	33.5	44.5	41.3	50.2	55.6
Current replacement cycle for desktop/notebook computers (years)							
Student labs							
1 year	0.9	-	4.0	0.9	1.4	-	-
2 years	11.0	6.6	-	8.5	18.3	6.0	11.1
3 years	60.7	67.2	72.0	57.6	56.7	63.9	66.7
4 years	21.3	18.0	16.0	25.4	18.8	24.1	22.2
5 years	6.1	8.2	8.0	7.6	4.8	6.0	-
Faculty offices							
1 year	0.2	1.7	-	-	-	-	-
2 years	2.4	-	4.2	3.4	3.9	-	-
3 years	44.1	40.0	50.0	40.2	44.0	46.2	77.8
4 years	38.2	38.3	33.3	41.0	39.6	35.4	22.2
5 years	15.2	20.0	12.5	15.4	12.6	18.5	-
Administrative offices							
1 year	0.2	-	-	0.9	-	-	-
2 years	2.8	1.8	-	2.6	4.4	0.8	11.1
3 years	42.2	43.9	40.9	42.7	42.4	39.2	66.7
4 years	40.4	42.1	45.5	37.6	40.0	43.1	22.2
5 years	14.4	12.3	13.6	16.2	13.2	16.9	-

Means and percentages by campus category

WEB AND NETWORKING ISSUES							
How important are the following issues on your campus?*							
Supporting instructional labs & clusters	6.1	6.0	5.8	6.2	5.9	6.3	6.4
Creating Web pages for dept. use and course resources	5.3	5.4	5.5	5.3	5.3	5.3	4.9
Web/Network access for all students	6.1	6.4	6.1	5.9	6.1	5.9	6.4
Managing dial-up access from off campus users	3.5	4.6	3.6	3.7	3.3	3.2	5.1
Network printing	5.2	4.9	4.8	4.9	5.2	5.5	5.4
Digital image libraries/archives	4.5	5.4	4.8	4.5	4.2	4.3	4.3
Creating plug & play network for notebook computer users	4.3	5.1	4.8	4.4	4.3	3.6	4.6
Network computers/thin client computing strategies	3.3	4.1	3.6	3.4	3.1	3.2	3.9
Network security	6.4	6.7	6.4	6.4	6.4	6.4	6.8
ATM	3.0	3.4	2.3	3.5	2.5	3.3	3.1
Gigabit ethernet	5.6	6.4	6.2	5.7	5.4	5.5	5.2
Electronic commerce	4.4	5.1	5.2	4.7	4.1	4.3	3.6
Wireless networks	5.0	5.9	5.4	5.1	4.9	4.4	4.6
e-mail accounts for alumni	3.5	4.0	4.5	3.4	3.8	2.6	3.8
User privacy	5.4	5.9	5.6	5.5	5.4	5.2	5.3
Making campus networks accessible to PDA devices	3.9	4.8	4.7	4.0	3.7	3.5	3.5
Primary medium for campus backbone/network							
Linking buildings							
Fiber	85.9	71.4	76.9	86.4	87.7	90.9	81.8
Gigabit Ethernet	11.4	22.2	19.2	12.7	10.5	6.3	-
Std. Ethernet/Coax	1.6	1.6	3.9	0.9	0.9	2.1	9.1
Twisted pair	0.3	1.6	-	-	0.5	-	-
Other	0.7	3.2	-	-	0.5	0.7	-
None	0.2	-	-	-	-	-	9.1
Within buildings							
Fiber	18.9	16.1	28.0	12.8	15.1	28.1	36.4
Gigabit Ethernet	14.0	12.9	12.0	15.4	13.8	15.1	-
Std. Ethernet/Coax	23.3	12.9	28.0	22.2	26.6	20.9	45.5
Twisted pair	42.5	51.6	28.0	48.7	43.6	36.0	18.2
Other	1.4	6.5	4.0	0.9	0.9	-	-
None	-	-	-	-	-	-	-
How well developed are network connections and the instructional infrastructure?							
Percentage of faculty connected to the campus network/have Internet access	97.8	97.9	98.5	98.7	97.8	97.6	89.5
Percentage of classrooms connected to the campus network/have Internet access	77.2	73.9	73.5	77.0	81.2	73.5	72.3
Percentage of classrooms with fixed computer projection capacity	27.1	29.4	31.4	26.3	28.7	24.1	18.3
Percentage of dormitory beds with network connection	75.2	91.1	97.6	81.8	88.7	15.6	28.8
Percentage of campus covered/served by wireless network access	10.9	12.4	8.8	8.5	13.3	9.3	1.5

Mean ratings and percentages by campus category

**Scale from 1="Not Important" to 7="Very Important"*

+Columns may not total 100% since responses are not mutually exclusive

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	All Insts.	Universities Public	Universities Private	4-Year Colleges Public	4-Year Colleges Private	2-Year Colleges Public	2-Year Colleges Private
WWW AND NETWORKING ISSUES (Continued)							
Current transmission capacity of your campus network							
High speed video							
Functional now	43.2	83.9	54.2	60.0	28.4	32.8	18.2
Coming A/Y 2001-02	10.8	9.7	20.8	8.2	5.9	19.5	9.1
Scheduled for A/Y 2002-03	15.6	6.5	12.5	13.6	17.7	18.0	27.3
Not applicable	30.4	-	12.5	18.2	48.0	29.7	45.5
ATM							
Functional now	28.2	61.7	47.8	45.1	12.5	20.6	18.2
Coming A/Y 2001-02	3.3	-	-	3.6	2.9	6.4	-
Scheduled for A/Y 2002-03	3.0	-	-	1.8	3.4	5.6	-
Not applicable	65.5	38.3	52.2	49.6	81.3	67.5	81.8
Local area wireless networks							
Functional now	50.6	85.3	84.0	51.8	47.2	34.6	27.3
Coming A/Y 2001-02	14.7	6.6	8.0	22.8	12.3	17.7	-
Scheduled for A/Y 2002-03	11.2	4.9	8.0	9.7	11.3	14.6	27.3
Not applicable	23.5	3.3	-	15.8	29.3	33.1	45.5
Full campus wireless networks							
Functional now	6.2	5.5	10.5	6.8	6.4	4.9	9.1
Coming A/Y 2001-02	6.6	14.6	10.5	5.8	5.9	4.1	9.1
Scheduled for A/Y 2002-03	22.0	34.6	36.8	26.2	19.7	13.1	36.4
Not applicable	65.1	45.5	42.1	61.2	68.0	77.9	45.5
Gigabit Ethernet							
Functional now	47.5	81.0	69.2	51.3	42.3	35.4	18.2
Coming A/Y 2001-02	12.4	8.6	11.5	13.9	11.5	13.9	18.2
Scheduled for A/Y 2002-03	20.6	6.9	15.4	18.3	21.2	28.5	27.3
Not applicable	19.5	3.5	3.9	16.5	25.0	22.3	36.4
Voice over IP							
Functional now	9.3	27.3	19.2	5.4	4.8	10.2	10.0
Coming A/Y 2001-02	10.8	20.0	30.8	7.2	4.3	16.4	10.0
Scheduled for A/Y 2002-03	24.0	29.1	23.1	27.9	18.8	28.1	10.0
Not applicable	56.0	23.6	26.9	59.5	72.1	45.3	70.0
Does your institution provide off-campus dial-up (ISP) services for:							
Students							
No	60.4	16.1	36.0	49.6	62.5	90.3	72.7
Yes, without a fee	30.8	61.3	44.3	38.5	31.5	6.7	27.3
Yes, for a fee	8.9	22.6	20.0	12.0	6.0	3.0	-
Faculty							
No	44.4	14.0	31.8	37.6	46.6	62.2	62.5
Yes, without a fee	48.0	61.4	54.6	53.5	49.2	34.5	37.5
Yes, for a fee	7.6	24.6	13.6	8.9	4.2	3.4	-
Number of dial-up modem ports available for student use	106.2	533.7	233.1	87.7	21.7	24.0	15.1
Number of "plug & play" ports on campus for mobile computer users	341.5	486.8	1,164.4	178.3	410.9	174.2	11.7

Means and percentages by campus category

	All Insts	Universities Public	Universities Private	4-Year Colleges Public	4-Year Colleges Private	2-Year Colleges Public	2-Year Colleges Private
ORGANIZATION, PLANNING AND IMPACT ISSUES							
Is your campus part of a multicampus system with shared computing resources?	45.4	65.1	34.6	61.3	22.7	62.2	18.2
Academic and administrative computing are:							
Separate units	32.8	30.2	38.5	32.8	30.0	36.8	36.4
One single unit	67.2	69.8	61.5	67.2	70.0	63.2	63.6
Has your institution reorganized IS units in past 2 years?*							
Academic computing	41.2	41.3	53.8	33.6	42.9	42.3	45.5
Administrative computing	36.5	41.0	56.0	30.8	37.4	34.5	36.4
Libraries	19.5	15.0	34.8	9.6	20.0	25.4	30.0
Do you anticipate a reorganization of IS in the next 2 years?*							
Academic computing	28.4	41.9	48.0	31.4	23.5	23.6	36.4
Administrative computing	26.4	35.0	29.2	31.4	22.1	23.7	36.4
Libraries	17.5	16.9	17.4	11.4	16.2	24.1	27.3
The heads of the academic and administrative units report to:							
Academic computing							
President	7.8	-	-	7.5	4.2	18.6	9.1
Provost	24.0	25.4	19.2	24.2	27.8	17.1	36.4
CIO or CTO	38.4	57.1	73.1	45.0	38.9	19.3	9.1
Other vice provost/vice president	23.8	15.9	7.7	20.8	24.1	31.4	36.4
Dean	6.1	1.6	-	2.5	5.1	13.6	9.1
Administrative computing							
President	9.8	-	-	7.6	5.6	24.1	9.1
Provost	12.5	16.1	7.7	15.3	14.8	5.7	18.2
CIO or CTO	41.3	56.5	73.1	50.0	41.7	22.7	18.2
Other vice provost/vice president	32.9	27.4	19.2	25.4	35.7	38.3	54.6
Dean	3.5	-	-	1.7	2.3	9.2	-
Libraries							
President	2.6	-	-	-	2.8	5.7	9.1
Provost	57.9	75.4	84.0	74.8	56.6	34.3	45.5
CIO or CTO	10.0	16.4	8.0	8.4	12.3	5.7	9.1
Other vice provost/vice president	17.8	8.2	4.0	10.9	17.0	32.1	9.1
Dean	11.6	-	4.0	5.9	11.3	22.1	27.3
Does institution have a chief information/technology officer?							
No	41.3	15.9	11.5	20.0	39.3	35.0	36.4
Currently under discussion	32.9	6.4	-	5.8	5.9	9.1	9.1
Yes	3.5	77.8	88.5	74.2	54.8	55.9	54.6
What academic and operational units report to the CIO/CTO?*							
Academic computing	56.8	73.0	80.8	66.7	51.3	46.6	45.5
Administrative computing	60.3	71.4	76.9	71.7	54.5	53.4	45.5
Libraries	13.6	15.9	11.5	10.0	16.1	11.0	27.3
Telecommunications	50.2	71.4	73.1	60.8	42.4	41.1	36.4
Who provides tech support for most departmental computer labs?							
Individual department	14.1	45.9	23.1	20.2	6.4	5.0	18.2
Central IT service unit	62.9	13.1	26.9	52.1	76.3	77.9	81.8
Both	23.1	41.0	50.0	27.7	17.4	17.1	-
Who makes decisions about selecting course management products?							
Individual department	18.7	9.8	20.8	13.9	11.6	35.0	45.5
Central IT service unit	42.2	32.8	33.3	46.1	52.8	29.3	27.3
Both	39.2	57.4	45.8	40.0	35.7	35.7	27.3
How does your institution deal with the "life cycle" in IT purchasing?							
One time allocation	14.9	22.2	15.4	18.5	7.8	19.2	18.2
Developing budget	30.7	38.1	26.9	31.9	27.4	31.9	36.4
Have budget	54.4	39.7	57.7	49.6	64.8	48.9	45.5

Means and percentages by campus category
**Columns may not total 100% since responses are not mutually exclusive*

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Appendix A

Survey Methodology

The 2001 National Survey of Computing and Information Technology in American Higher Education was designed to collect information about campus planning, policies, and procedures affecting the use of computers and information technology resources from colleges and universities in the United States (including Alaska and Hawaii).

The 2001 questionnaire was mailed to a representative sample of 1,573 two- and four-year US colleges and universities in June, 2001. The sampling design focused on public and private two- and four-year colleges and universities, omitting the small branch campuses of multi-campus districts and some very small private two- and four-year college (i.e., institutions enrolling under 200 students).[8] Proprietary schools were also excluded from the survey sample.

Questionnaires were mailed to the institution's chief academic computing officer. In those instances where it was not possible to identify, by name, an individual responsible for academic or administrative computing, the survey was mailed to the chief academic officer of the institution.

A second wave of surveys were mailed to non-responding institutions late in August, 2001. A total of 590 institutions (38.4 percent response rate) completed usable questionnaires by October 12, 2001, the closing date to receive surveys. The number of colleges and universities represented in the 2001 Survey report, by type of institution, are shown below.

Public Universities	63
Private Universities	26
Public Four-Year Colleges	120
Private Four-Year Colleges	224
Public Two-Year Colleges	146
Private Two-Year Colleges	11

[8] Data from the US Department of Education reveal that 12.5 percent (490) of the nation's 3,913 accredited degree-granting two- and four-year colleges and universities enroll under 200 students. These institutions account for some 56,700 (3.9 pct.) of the nation's 14.54 million college students. In contrast, the 408 colleges and universities that enroll 10,000 or more students represent just 11.5 of the total number of US degree-granting institutions yet account for 49.3 percent of total headcount enrollment, some 7.17 million students (source: *Digest of Education Statistics 2000*, US Department of Education, 2000, table 216, http://nces.ed.gov/pubs2001/digest/dt216.html)

Appendix B

The 2001 Campus Computing Survey Questionnaire

CAMPUS COMPUTING, 2001

THE NATIONAL SURVEY OF INFORMATION TECHNOLOGY IN HIGHER EDUCATION

www.campuscomputing.net

Dear Colleague

This year marks the 12th national survey of computing and information technology. The annual Campus Computing Survey is part of a continuing national project focused on campus policies, plans, and procedures affecting academic computing in two- and four-year colleges and universities. Your responses contribute to a better understanding of the ways campuses across the country are planning for and using information technology resources to enhance instruction and scholarship.

Please take the time to complete this questionnaire. All responses will be treated in a confidential manner. Thank you for your assistance.

Kenneth C. Green
The Campus Computing Project
818.990.2212 kgreen@campuscomputing.net

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Please attach a business card with the correct name, title, and mailing address of the survey respondent. Printed addresses will be used to send you a copy of the 2001 survey report.

Please respond to all questions based on institutional policies, i.e., policies that apply broadly to students, faculty, administrators and staff in all units of your institution.

A. General Campus Policies About Computing and Information Technology

1. Does your campus have a formal policy promoting or mandating computers/IT resources for
   curriculum utilization? ① no ② yes — undergraduates? ① no ② yes
   graduate/prof. students? ① no ② yes — distance education? ① no ② yes

2. Does your institution have a *computer instruction, computer competency, technology literacy or information literacy* requirement for all undergraduates? ① no ② yes

3. Does your institution have a special computer use/technology fee or annual/term computer use charge for all students?
   ① no ② yes *If yes*, total annual (full-time) student fee or charge for 2001-2002 $ _____

4. Does your campus have a code of conduct/acceptable use policy for campus e-mail accounts and individual Web pages? ① no ② yes

5. Please check the *Operating Systems/Interfaces* recommended or supported by your institution.
   - ❑ Mac OS 9 or earlier
   - ❑ Mac OS X
   - ❑ UNIX
   - ❑ Linux
   - ❑ Windows 95/98/ME
   - ❑ Windows NT Workstation
   - ❑ Windows 2000
   - ❑ Windows XP
   - ❑ Open VMS
   - ❑ Novell
   - ❑ *None* (My campus does not recommend a specific operating system or interface.)

6. Does your institution *require* or *strongly recommend* computer ownership? *(please check all that apply)*
   for all students — ① no ② recommend ③ require
   for students in specific disciplines or programs — ① no ② recommend ③ require
   for students in individual academic units/prof. programs — ① no ② recommend ③ require

7. Does your institution (or individual units or programs) specifically recommend a particular brand or product for

	hardware	software
students?	① no ② yes	① no ② yes
faculty?	① no ② yes	① no ② yes
administrators/staff?	① no ② yes	① no ② yes

If you answered "yes" to any part of #7 please go on to #8, otherwise, please go on to #9.

8. Please check the brand(s)/kinds(s) of computer system(s) generally recommended by your institution.

Apple/Macintosh	Window Compatibles	UNIX/Linux Systems
❑ iMacs	❑ Pentium III class desktops/notebooks	❑ Compaq ❑ Dell ❑ HP
❑ G4 desktop computers	❑ Pentium Celeron desktops/notebooks	❑ IBM ❑ Silicon Graphics
❑ iBooks	❑ Pentium IV class desktops/notebooks	❑ Sun ❑ Other? _____
❑ PowerBooks		

9.

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B. Hardware and Software Resale Policies and Programs

9 Does your institution have a special pricing or resale agreement with one or more *technology* vendors?

hardware	software	
①	②	no, we do not have any kind of computer resale program. *(skip to item 10)*
①	**②**	**no, we do not have a special discount program although we do sell products through an on-campus facility**
①	②	yes, for products sold through the campus bookstore.
①	**②**	**yes, for products sold through a special campus center or outlet *not* affiliated with our bookstore**
①	②	yes, for products sold by special agreement with an off-campus dealer
①	**②**	**yes, for products sold *online* by special agreement with one or more vendors.**

10 Does your institution *require* computer buyers to purchase software as part of the resale program?
① no ② strongly encouraged but not required ③ required

11 Does your institution have a written policy regarding the *duplication of copyrighted software software piracy*?
① no ② no, but under development ③ yes

C. Academic & Instructional Computing Policies, Procedures & Resources

12 Does your campus/institution

have a formal plan for integrating information technology into the curriculum?	① no ② yes
have one or more formal projects for developing desktop instructional software/courseware?	**① no ② yes**
provide any formal support or assistance (e.g., funding, release time, technical assistance) to help faculty who wish to develop *instructional* software/courseware?	① no ② yes
provide any formal support or assistance (e.g., funding, release time, technical assistance) to assist faculty who may wish to develop software to assist their *research*?	**① no ② yes**
have a policy or program for rewarding courseware development or providing incentives for faculty to develop instructional software/courseware?	① no ② yes
have a technology resource center that focuses on the instructional use of information technology?	**① no ② yes**
have one or more agreements or licenses for on-campus duplication and distribution of desktop/notebook computer software products?	① no ② yes
have a formal plan for using the Internet and Web resources in instruction?	**① no ② yes**
have a formal plan for using the Internet and Web resources in distance education?	① no ② yes
have a formal plan for using the Internet and Web for marketing and promotion to off-campus audiences (e.g., alumni, prospective students)?	**① no ② yes**
have a formal program to recognize and reward the use of information technology as part of the routine faculty review and promotion process?	① no ② yes
maintain a library of academic courseware for faculty review and evaluation?	**① no ② yes**
have a formal program to assess the impact of IT on instruction and learning outcomes?	① no ② yes
have a formal policy regarding ownership of Web-based curriculum resources and intellectual property developed by faculty?	**① no ② yes**
have a formal program to provide supplemental IT training for IT staff?	① no ② yes
assess the impact of IT on instructional services and academic programs?	**① no ② yes**
provide ADA-compliant Web pages?	① no ② yes

13 Does your institution have a strategic plan for

information technology	① no	② currently preparing a plan	③ yes, we have a plan
electronic commerce	**① no**	**② currently preparing a plan**	**③ yes, we have a plan**
distance education	① no	② currently preparing a plan	③ yes, we have a plan
campus portal services	**① no**	**② currently preparing a plan**	**③ yes, we have a plan**
wireless networks	① no	② currently preparing a plan	③ yes, we have a plan
deploying course mgmt. tools	**① no**	**② currently preparing a plan**	**③ yes, we have a plan**

14 Has your institution established a specific *single product standard* for any of the following (i.e., your campus supports only one product)

desktop notebook computer operating system
① no *if yes,* O/S ② Macintosh ③ Win 95/98 ④ Win NT Workstation ⑤ Win 2000

desktop notebook product or manufacturer
① no *if yes,* product ② Apple ③ Compaq ④ Dell ⑤ Gateway ⑥ HP ⑦ IBM ⑧ other

groupware
① no *if yes,* product ② Lotus Notes ③ Microsoft Exchange ④ Novell Groupwise ⑤ other

course management system
① no *if yes,* product ② Blackboard ③ eCollege ④ Lotus Learning Space ⑤ Prometheus ⑥ WebCT ⑦ other

please go on to the next page >>>

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15. What academic and institutional resources and services are currently available on your campus Web site (or portal service)?

- ❑ **Undergraduate admissions application**
- ❑ Financial aid application
- ❑ **Current course catalog**
- ❑ Program/major/degree requirements
- ❑ **Course registration**
- ❑ Course add/drop options
- ❑ **E-commerce (fee payments, etc.)**
- ❑ Online Courses (i.e., full course online)
- ❑ **Library/card catalog**
- ❑ Interlibrary loan services
- ❑ **Journals & reference resources**
- ❑ Course reserves
- ❑ **Student transcripts**
- ❑ IT support resources
- ❑ **IT training/tutorials**
- ❑ Instructional software
- ❑ **Faculty/staff directory**
- ❑ Student newspaper
- ❑ **Student handbook**
- ❑ Athletic event schedule
- ❑ **Alumni information/services**
- ❑ Press releases/media services
- ❑ **Campus book store**
- ❑ Personalized student calendar

D. FUTURE ISSUES AFFECTING CAMPUS COMPUTING

16. As you think about the future of computing and information technology at your institution, please indicate how important you see the following items in the overall campus computing/information technology environment and IT policy and planning over the next 2-3 years.

	Not important						*Very important*
Operating System Interface Development Tools							
Windows 95/98/ME	1	2	3	4	5	6	7
Windows NT Server	1	2	3	4	5	6	7
Windows 2000 Desktop	1	2	3	4	5	6	7
Windows 2000 Server	1	2	3	4	5	6	7
Windows XP	1	2	3	4	5	6	7
Macintosh OS X	1	2	3	4	5	6	7
Macintosh OS X server	1	2	3	4	5	6	7
Solaris	1	2	3	4	5	6	7
Unix	1	2	3	4	5	6	7
Linux (desktop/client)	1	2	3	4	5	6	7
Linux (server)	1	2	3	4	5	6	7
Hardware							
Notebook computers	1	2	3	4	5	6	7
Macintosh computers	1	2	3	4	5	6	7
UNIX Workstations	1	2	3	4	5	6	7
Network computers (NCs)	1	2	3	4	5	6	7
PDAs/Handheld computers	1	2	3	4	5	6	7
"Smart" Cards	1	2	3	4	5	6	7
DVD	1	2	3	4	5	6	7
Instructional Applications and Resources							
Developing instructional software	1	2	3	4	5	6	7
Using instructional software in classes	1	2	3	4	5	6	7
Using instructional software as a supplement to classes	1	2	3	4	5	6	7
Computer-based classroom presentation facilities	1	2	3	4	5	6	7
Internet resources for instruction	1	2	3	4	5	6	7
Web pages for classes	1	2	3	4	5	6	7
Web-based tutorials	1	2	3	4	5	6	7
e-Books (e-textbooks)	1	2	3	4	5	6	7

	Not important						*Very important*
Networking & Internet Web Issues & Resources							
Merging data & telecommunication networks	1	2	3	4	5	6	7
Wireless networks	1	2	3	4	5	6	7
Voice over IP	1	2	3	4	5	6	7
Bluetooth	1	2	3	4	5	6	7
Lotus Notes	1	2	3	4	5	6	7
Microsoft Exchange	1	2	3	4	5	6	7
Java	1	2	3	4	5	6	7
XML	1	2	3	4	5	6	7
Shockwave	1	2	3	4	5	6	7
Quicktime	1	2	3	4	5	6	7
Real Player	1	2	3	4	5	6	7
Microsoft Media Player	1	2	3	4	5	6	7
Gigabit Ethernet	1	2	3	4	5	6	7
ATM	1	2	3	4	5	6	7
Adobe Acrobat	1	2	3	4	5	6	7
Microsoft Reader	1	2	3	4	5	6	7
Internet 2	1	2	3	4	5	6	7
Internet Videoconferencing	1	2	3	4	5	6	7
Network security	1	2	3	4	5	6	7
E-commerce on the Web	1	2	3	4	5	6	7
Open Source software	1	2	3	4	5	6	7
Student portal services	1	2	3	4	5	6	7
IMS Standards	1	2	3	4	5	6	7
Course mgmt. software	1	2	3	4	5	6	7
User Support Services Campus IT Services							
On-line IT training	1	2	3	4	5	6	7
On-line technical support	1	2	3	4	5	6	7
Advertising on the student portal site	1	2	3	4	5	6	7
Computer repair services	1	2	3	4	5	6	7
Alumni services via the campus Web site	1	2	3	4	5	6	7

17. How would you rate the "technology infrastructure" at your institution?

	poor						*excellent*
computer networks and data communication	1	2	3	4	5	6	7
telecommunications and phone system	1	2	3	4	5	6	7
wireless networks	1	2	3	4	5	6	7
user support services	1	2	3	4	5	6	7
on-line reference resources in the campus library/library system	1	2	3	4	5	6	7
Web resources to support instruction	1	2	3	4	5	6	7
e-commerce capacity	1	2	3	4	5	6	7
campus web site services/student portal	1	2	3	4	5	6	7
network security against hackers and virus attacks	1	2	3	4	5	6	7
IT training for faculty	1	2	3	4	5	6	7
IT training for students	1	2	3	4	5	6	7

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18. Many campuses find themselves facing shifting enrollments, changing financial resources, growing demand for IT services, and increasing IT expenditures. How is your campus addressing these issues?

	Doing This Already	*Beginning in 2001-02 Year*	*Reviewing For 2001-02 Year*	*Decided Not To Do This*
Reducing purchases of computer technology	①	②	③	④
Charging fees to depts. and service units (e.g., networking, printing)	①	②	③	④
Requiring a computer/IT fee for all students	①	②	③	④
Leasing rather than buying hardware	①	②	③	④
More active recycling of older equipment to other departments and units	①	②	③	④
Vendor financing	①	②	③	④
Reducing hours in public access facilities	①	②	③	④
Reducing services (e.g., less consulting, training)	①	②	③	④
Reorganizing operations (e.g., combining units to coordinate staffing)	①	②	③	④
Reducing staff	①	②	③	④
Using info. technology (IT) to reduce instructional costs	①	②	③	④
Making greater use of student assistants to address user support needs	①	②	③	④
Outsourcing Internet access/ISP services commercial providers (e.g., AOL, AT&T, Earthlink)	①	②	③	④
Outsourcing computing/ IT services to commercial providers	①	②	③	④
Outsourcing student portal services to commercial providers	①	②	③	④

E. Future Issues Affecting Campus Computing

19. As you look at the future of computing on your campus, please indicate how important the following computing/ information technology issues will be in the overall campus computing environment over the next 2-3 years.

	Not Important					*Very Important*	
Assessing the benefits of existing investments in computing and technology resources	①	②	③	④	⑤	⑥	⑦
Clarifying goals and campus plans for technology resources	①	②	③	④	⑤	⑥	⑦
Providing incentives and rewards for faculty to support technology integration into the curriculum	①	②	③	④	⑤	⑥	⑦
Allocating campus funds to support expanded services	①	②	③	④	⑤	⑥	⑦
Faculty concerns about the benefits of computing in the curriculum	①	②	③	④	⑤	⑥	⑦
Administrative concerns about the benefits of computing in the curriculum	①	②	③	④	⑤	⑥	⑦
Developing/strengthening vendor relationships	①	②	③	④	⑤	⑥	⑦
Charging fees to students for computer/network access	①	②	③	④	⑤	⑥	⑦
Establishing/maintaining campus-wide standards for *hardware*	①	②	③	④	⑤	⑥	⑦
Establishing/maintaining campus-wide standards for *software*	①	②	③	④	⑤	⑥	⑦
Operating a computer resale program for students and faculty	①	②	③	④	⑤	⑥	⑦
Developing budget mechanisms to replace aging equipment on a routine basis	①	②	③	④	⑤	⑥	⑦
Using Internet/Web resources in instruction	①	②	③	④	⑤	⑥	⑦
Using technology-based commercial curriculum products	①	②	③	④	⑤	⑥	⑦
Using info. technology resources to enhance our distance education program	①	②	③	④	⑤	⑥	⑦
Negotiating site licensing agreements with textbook publishers	①	②	③	④	⑤	⑥	⑦
Negotiating site licensing agreements with academic publishers	①	②	③	④	⑤	⑥	⑦
Sharing digital resources with other campuses/institutions	①	②	③	④	⑤	⑥	⑦
Developing/updating campus policies for Web-based intellectual property	①	②	③	④	⑤	⑥	⑦
Helping our IT personnel stay current with new technologies	①	②	③	④	⑤	⑥	⑦
Retaining current IT personnel, given off-campus competition	①	②	③	④	⑤	⑥	⑦
Electronic commerce	①	②	③	④	⑤	⑥	⑦
Web-based instructional/course management systems	①	②	③	④	⑤	⑥	⑦
Acquiring IT resources via corporate grants from key vendors	①	②	③	④	⑤	⑥	⑦
Providing a "campus portal" for Web-based student services	①	②	③	④	⑤	⑥	⑦
Moving more of our user support services to the Web	①	②	③	④	⑤	⑥	⑦
Surveying students and faculty about IT issues and services	①	②	③	④	⑤	⑥	⑦
Deploying CRM software	①	②	③	④	⑤	⑥	⑦

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20. Compared to last year (2000-2001), how do you expect this year's budget (2001-02) to change with regard to academic computing overall, and to institutional purchases of desktop/notebook computers and network servers and software?

	Reduced 5%	*Reduced 3-5%*	*Reduced 1-3%*	*No Change*	*Increased 1-3%*	*Increased 3-5%*	*Increased 5%*
Total academic computing budget	①	②	③	④	⑤	⑥	⑦
Total administrative computing budget	①	②	③	④	⑤	⑥	⑦
Purchases of computers by academic computing units	①	②	③	④	⑤	⑥	⑦
Purchases of computers by administrative computing units	①	②	③	④	⑤	⑥	⑦
All institutional purchases of desktop/notebook computers	①	②	③	④	⑤	⑥	⑦
Network servers	①	②	③	④	⑤	⑥	⑦
Server software & related products	①	②	③	④	⑤	⑥	⑦
User training and support	①	②	③	④	⑤	⑥	⑦

21. Did your budget for academic computing experience a mid-year cut during 2000-01?
① no ② yes *If yes*, by what percentage? ____%

22. What is the total Academic Computing budget for A/Y 2001-2002? $ ___,___,___,___

23. Allocation of the IT/Academic Computing Budget (estimated percentages, numbers may not equal 100% because of the overlap of categories, such as personnel and user support)

____% hardware ____% software ____% personnel

____% content licenses ____% user support ____% network service/support

24. The Academic Computing Budget for this campus represents what percentage of *total* institutional expenditures on information technology/academic computing? ____ percent

25. Current replacement cycle for institutionally-owned desktop & notebook computers (number of years)
student labs ① ② ③ ④ ⑤ ⑥ faculty offices ① ② ③ ④ ⑤ ⑥ administrative offices ① ② ③ ④ ⑤ ⑥

F. Web and Networking Issues

26. How important are the following issues in discussions about and planning for networking on your campus?

	Not important						*Very important*
Supporting instructional labs and clusters	①	②	③	④	⑤	⑥	⑦
Creating Web pages for department use and course resources	①	②	③	④	⑤	⑥	⑦
Web/Network access for all students	①	②	③	④	⑤	⑥	⑦
Managing demand for dial-up access from off-campus users	①	②	③	④	⑤	⑥	⑦
Network printing	①	②	③	④	⑤	⑥	⑦
Digital image libraries/archives	①	②	③	④	⑤	⑥	⑦
Creating a "plug & play" network for notebook computer users	①	②	③	④	⑤	⑥	⑦
Network computers/"thin client" computing strategies	①	②	③	④	⑤	⑥	⑦
Network security	①	②	③	④	⑤	⑥	⑦
ATM	①	②	③	④	⑤	⑥	⑦
Gigabit ethernet	①	②	③	④	⑤	⑥	⑦
Electronic commerce	①	②	③	④	⑤	⑥	⑦
Wireless networks	①	②	③	④	⑤	⑥	⑦
E-mail accounts for alumni	①	②	③	④	⑤	⑥	⑦
User privacy	①	②	③	④	⑤	⑥	⑦
Making campus networks accessible to PDA/handheld devices	①	②	③	④	⑤	⑥	⑦

27. What is the primary medium for your campus backbone network?
Linking buildings
① Fiber ② Gigabit Ethernet ③ Std. Ethernet/Coax ④ Twisted Pair ⑤ Other _____ ⑥ none
Within buildings
① Fiber ② Gigabit Ethernet ③ Std. Ethernet/Coax ④ Twisted Pair ⑤ Other _____ ⑥ none

28. How well-developed are your institutional network connections and instructional infrastructure?

____ percentage of faculty offices that are connected to the campus network have Internet access?
____ **percentage of classrooms that are connected to the campus network have Internet access?**
____ percentage of classrooms that have fixed permanent computer projection capacity?
____ **percentage of dormitory beds that have a network connection ("wire to the pillow")?**
____ percentage of campus covered served by wireless network access?

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29. What is the current transmission capacity of your campus network?

	functional now	coming A.Y. 2001-02	scheduled for A.Y. 2002-03	not applicable
high speed video	①	②	③	④
ATM	①	②	③	④
Local area wireless networks	①	②	③	④
Full campus wireless networks	①	②	③	④
Gigabit Ethernet	①	②	③	④
Voice over IP	①	②	③	④

30. Does your institution provide off-campus dial-up (ISP) services for
Students ① no ② yes, without fee ③ yes, for a fee *Faculty* ① no ② yes, without fee ③ yes, for a fee

31. What is your best estimate of the number dial-up modem ports available for student use? |__|,|__|__|__|

32. What is your best estimate of the number of "plug & play" ports on campus for mobile computer users? |__|,|__|__|__|

F. VENDOR ASSESSMENTS

33. What is your assessment of the companies that sell technology products and services to the higher education market?

Ratings: ① Strongly Disagree (SD) ② Disagree ③ Agree ④ Strongly Agree (SA)

	My Campus Currently Does Business With This Company	*Has Appropriate Products for Campus Users* SD D A SA	*Understands Computing Issues Affecting My Campus* SD D A SA	*Will Play an Important Role in our Computing Plans for the Next 2-3 Years* SD D A SA
Hardware Companies				
Apple	❑	① ② ③ ④	① ② ③ ④	① ② ③ ④
Compaq	❑	① ② ③ ④	① ② ③ ④	① ② ③ ④
Dell	❑	① ② ③ ④	① ② ③ ④	① ② ③ ④
Gateway	❑	① ② ③ ④	① ② ③ ④	① ② ③ ④
Handspring	❑	① ② ③ ④	① ② ③ ④	① ② ③ ④
Hewlett Packard	❑	① ② ③ ④	① ② ③ ④	① ② ③ ④
IBM	❑	① ② ③ ④	① ② ③ ④	① ② ③ ④
Palm	❑	① ② ③ ④	① ② ③ ④	① ② ③ ④
Sun Microsystems	❑	① ② ③ ④	① ② ③ ④	① ② ③ ④
Toshiba	❑	① ② ③ ④	① ② ③ ④	① ② ③ ④
Software, Instructional Services, Networking, Administrative Systems, and Telecommunications				
Alcatel	❑	① ② ③ ④	① ② ③ ④	① ② ③ ④
Academic Systems	❑	① ② ③ ④	① ② ③ ④	① ② ③ ④
Adobe Systems	❑	① ② ③ ④	① ② ③ ④	① ② ③ ④
AOL/Netscape	❑	① ② ③ ④	① ② ③ ④	① ② ③ ④
Blackboard	❑	① ② ③ ④	① ② ③ ④	① ② ③ ④
Campus Pipeline	❑	① ② ③ ④	① ② ③ ④	① ② ③ ④
Cisco Systems	❑	① ② ③ ④	① ② ③ ④	① ② ③ ④
CMDS-Datatel-Jenzabar	❑	① ② ③ ④	① ② ③ ④	① ② ③ ④
COLLEGIS	❑	① ② ③ ④	① ② ③ ④	① ② ③ ④
eCollege	❑	① ② ③ ④	① ② ③ ④	① ② ③ ④
Eduprise	❑	① ② ③ ④	① ② ③ ④	① ② ③ ④
Lotus Development Corp.	❑	① ② ③ ④	① ② ③ ④	① ② ③ ④
Lucent Technologies	❑	① ② ③ ④	① ② ③ ④	① ② ③ ④
Macromedia	❑	① ② ③ ④	① ② ③ ④	① ② ③ ④
Microsoft	❑	① ② ③ ④	① ② ③ ④	① ② ③ ④
Novell	❑	① ② ③ ④	① ② ③ ④	① ② ③ ④
Nortel	❑	① ② ③ ④	① ② ③ ④	① ② ③ ④
Oracle	❑	① ② ③ ④	① ② ③ ④	① ② ③ ④
Prometheus	❑	① ② ③ ④	① ② ③ ④	① ② ③ ④
PeopleSoft	❑	① ② ③ ④	① ② ③ ④	① ② ③ ④
SCT	❑	① ② ③ ④	① ② ③ ④	① ② ③ ④
Symantec	❑	① ② ③ ④	① ② ③ ④	① ② ③ ④
WebCT	❑	① ② ③ ④	① ② ③ ④	① ② ③ ④
3 Com	❑	① ② ③ ④	① ② ③ ④	① ② ③ ④

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H. ORGANIZATION, PLANNING, AND IT IMPACT ISSUES

34. Is your campus part of a multicampus system with shared computing resources ① no ② yes

35. Academic and administrative computing on your campus are ① separate units ② one single unit

36. Has your institution reorganized information services units within the past two years?
Academic Computing ① no ② yes Administrative Computing ① no ② yes Libraries ① no ② yes

37. Do you anticipate a reorganization of information services units within the next two years?
Academic Computing ① no ② yes Administrative Computing ① no ② yes Libraries ① no ② yes

38. How does your campus coordinate academic and administrative computing operations? The heads of each unit report to

Academic Computing	*Administrative Computing*	*Libraries*
① president	① president	① president
② provost (chief academic officer)	② provost (chief academic officer)	② provost (chief academic officer)
③ CIO or CTO	③ CIO or CTO	③ CIO or CTO
④ other vice provost/vice president	④ other vice provost/vice president	④ other vice provost/vice president
⑤ dean	⑤ dean	⑤ dean

39. Does your institution have a chief information officer/chief technology officer (CIO/CTO)?
① no (go to #41) ② no, but currently under discussion (go to #41) ③ yes (to go #40)

40. What academic and operational units report to the CIO/CTO?
❒ academic computing ❒ administrative computing ❒ libraries ❒ telecommunications

41. Which unit provides tech. support for most departmental computer labs ① individual dept ② central IT service unit ③ both

42. Which unit makes decisions about selecting course mgmt. products ① individual dept ② central IT service unit ③ both

43. How does your institution deal with the "life cycle" issues affecting the institutional purchase (and upgrading/replacement) of desktop computers for faculty, classrooms, clusters, and labs?
① Most institutional purchases of desktop systems are acquired through a special one-time allocation or appropriation.
② Although we generally purchase equipment on a one-time allocation, we are developing a budget mechanism (or budget planning model) to help us routinely "acquire and retire" new technology.
③ We have a budget mechanism (or budget planning model) to help us routinely "acquire and retire" new technology.

44. From your perspective, how well does your institution prepare your students (i.e., undergraduates) for the technology skills they will need and technology challenges they will encounter over the next decade?

Academic Field Program	*Poor*				*Excellent*
biological & physical sciences	①	②	③	④	⑤
business	①	②	③	④	⑤
education	①	②	③	④	⑤
engineering	①	②	③	④	⑤
fine & performing arts	①	②	③	④	⑤
humanities	①	②	③	④	⑤
mathematics	①	②	③	④	⑤
social sciences	①	②	③	④	⑤
occupational programs	①	②	③	④	⑤
Overall Campus Preparation	①	②	③	④	⑤

45. From your perspective, how well prepared are the faculty at your institution to use technology as a resource for instruction and scholarship? To use the Internet and the Web as a resource for curriculum and instruction?

	For Instruction					*For Scholarship & Research*					*Internet & Web Resources*				
	Poor				Excellent	Poor				Excellent	Poor				Excellent
biological & physical sciences	①	②	③	④	⑤	①	②	③	④	⑤	①	②	③	④	⑤
business	①	②	③	④	⑤	①	②	③	④	⑤	①	②	③	④	⑤
education	①	②	③	④	⑤	①	②	③	④	⑤	①	②	③	④	⑤
engineering	①	②	③	④	⑤	①	②	③	④	⑤	①	②	③	④	⑤
fine & performing arts	①	②	③	④	⑤	①	②	③	④	⑤	①	②	③	④	⑤
humanities	①	②	③	④	⑤	①	②	③	④	⑤	①	②	③	④	⑤
mathematics	①	②	③	④	⑤	①	②	③	④	⑤	①	②	③	④	⑤
social sciences	①	②	③	④	⑤	①	②	③	④	⑤	①	②	③	④	⑤
occupational programs	①	②	③	④	⑤	①	②	③	④	⑤	①	②	③	④	⑤
Overall Campus Preparation	①	②	③	④	⑤	①	②	③	④	⑤	①	②	③	④	⑤

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I. KEY INFORMATION TECHNOLOGY ISSUES CONFRONTING COLLEGES AND UNIVERSITIES

46. Please indicate the degree to which you agree or disagree with the following statements.
Ratings: ① Strongly Disagree (SD) ② Disagree ③ Agree ④ Strongly Agree (SA)

	SD	D	A	SA
Faculty have unreasonable expectations about user support services.	①	②	③	④
Technology has done much to improve instruction on my campus.	①	**②**	**③**	④
We plan to require all our students to own a computer by Fall 2003.	①	②	③	④
Access to Internet 2 by Fall 2002 is essential to our long-term technology needs.	①	**②**	**③**	④
Colleges should permit commercial advertising on campus web sites/portals.	①	②	③	④
Our adm. systems provide effective support for conducting college business.	①	**②**	**③**	④
My campus does a good job of planning our short- term and mid-range tech. needs	①	②	③	④

47. The *single most important* information technology issue confronting my institution over the next two or three years is: *(mark only one)*

① Providing online/distance education via the Web
② Providing adequate user support
③ Assisting faculty integrate technology into instruction
④ Financing the replacement of aging hardware/software
⑤ Moving toward campus-wide wireless networks
⑥ Integrating academic and administrative IT services
⑦ Providing student portal services
⑧ Integrating eCommerce into campus services
⑨ Hiring/retaining qualified IT staff
⑩ Upgrading/replacing administrative IT/ERP systems

J. CURRENT IT/COMPUTER FACILITIES AND RESOURCES

48. What was the total *headcount* enrollment on your campus as of Spring 2001? |__|__|__|__|__|

49. What is your best estimate of the total number of institutionally-owned desktop/notebook computers and workstations on your campus as of May, 2001? (Please include systems in faculty offices and in labs, clusters, classrooms, residence halls, etc.)
Desktop/notebook computers |__|__|__|__|__|__| Unix Workstations |__|__|__|__|__|__|

50. What is your *best estimate* of the total number of *personally-owned* desktop and notebook computers used on your campus as of May, 2001? (Include personally purchased systems owned by students and faculty.) |__|__|__|__|__|__|

51. What is your *best estimate* of the proportion of individuals in your campus community who have or own computers:
students: desktops |__|__|__|% notebooks |__|__|__|% *faculty*: desktops |__|__|__|% notebooks |__|__|__|%

52. Estimated total number of desktop/notebook computers (PC's and workstations) purchased by:

	2000-01	2001-2002
students	|__|__|__|__|	|__|__|__|__|
faculty (personal & office/project use)	|__|__|__|__|	|__|__|__|__|
administrators/staff (personal & office/project use)	|__|__|__|__|	|__|__|__|__|
campus labs, clusters & other instructional use	|__|__|__|__|	|__|__|__|__|

53. Total number of *computer labs, clusters,* and *classrooms* on your campus as of May, 2001? |__|__|__|

54. How many of these computer labs/clusters/classrooms are specifically dedicated for use by individual departments or units (e.g., writing program, engineering, social science)? |__|__|__|

55. Total number of *computers and workstations* in *all* the labs/classrooms/clusters on your campus as of May, 2001? Computers |__|__|__|__|__|__| Unix Workstations |__|__|__|__|__|__|

56. Total number of network servers on your campus? |__|__|__|__|__|

57. What is your *best estimate* (percentage) of the operating systems now installed on institutionally-owned desktop/notebook computers and network servers? *(example:* 20 pct. use the Mac O/S, 25 pct. use Win 95, 30 pct use Win 98)
computers clients: % Mac|__|__| Win 95/98/2000|__|__|__| Win NT|__|__|__| Unix |__|__|__| Linux |__|__|__|
network servers: % Mac |__|__|__| Win NT |__|__|__| Win 2000 Server |__|__|__|
Unix |__|__|__| Linux |__|__|__| Novell |__|__|__|

58. Total number (FTE) of IT help desk/technical support personnel (incl. departmental staff)? |__|__|__|

59. Percentage of faculty who have an individual/personal Web page (for the person, not for a class) |__|__|__| pct.

60. What is your *best estimate* of the proportion/percentage of classes that use the following info. tech. resources:

|__|__|__| computer-based classrooms or labs
|__|__|__| computer-based simulations or exercises
|__|__|__| presentation handouts
|__|__|__| electronic mail
|__|__|__| commercial courseware/instructional resources
|__|__|__| Internet resources (from off-campus sources)
|__|__|__| course mgmt. tools for online course resources
|__|__|__| Web pages for class materials & resources

THANK YOU FOR YOUR ASSISTANCE!
PLEASE FOLD AND MAIL IN THE ENCLOSED POSTAGE-PAID ENVELOPE

Appendix C

Institutions Participating in the 2001 Campus Computing Survey

Abilene Christian University, TX
Agnes Scott College, GA
Aims Community College, CO
Albertson College of Idaho, ID
Albertus Magnus College, CT
Albion College, MI
Albright College, PA
Alcorn State University, MS
Alexandria Technical College, MN
Alfred University, NY
Allegany College of Maryland
Alma College, MI
Alverno College, WI
Amarillo College, TX
Amherst College, MA
Ancilla College, IN
Anderson College, SC
Anderson University, IN
Angelina College, TX
Antioch College, OH
Arapahoe Community College, CO
Ardmore Higher Educ Center, OK
Arizona State University, AZ
Arkansas Tech University, AR
Ashland University, OH
Athens State University, AL
Atlantic Cape Comm. College, NJ
Augusta Technical Inst., GA
Augustana College, SD
Aurora University, IL
Austin Community College, TX
Azusa Pacific University, CA

Babson College, MA
Bakersfield College, CA
Baldwin-Wallace College, OH
Ball State University, IN
Barstow College, CA
Bates College, ME
Baylor University, TX
Bellarmine University, KY
Belmont Abbey College, NC
Belmont University, TN
Beloit College, WI
Bemidji State University, MN
Benedict College, SC
Benedictine University, IL
Berea College, KY
Bergen Community College, NJ
Bethany Lutheran College, MN
Bethel CollegeMN
Bethune-Cookman College, FL
Big Bend Comm. College, WA
Biola University, CA
Blackhawk Technical College, WI
Bloomfield College, NJ
Blue Ridge Comm. College, VA
Bluefield State College, WV
Boise State University, ID
Bowie State University, MD
Bridgewater College, VA
Brigham Young University ,UT
Brookdale Comm. College, NJ
Broward Community College, FL
Brown University, RI
Brunswick College, GA
Brunswick Comm. College, NC
Bryn Mawr College, PA
Bucknell University, PA
Bucks County Comm. College, PA
Bunker Hill Comm. College, MA

Caldwell College, NJ
Calif Polytechnic State Univ-San Luis Obispo
Calif State Polytechnic Univ-Pomona
Calif State Colleges & Univ
Bakersfield
Chico
Dominguez Hills
Fresno
Fullerton
Hayward
Humboldt State Univ
Long Beach
Los Angeles
Monterey Bay
Northridge
Sacramento
San Bernardino
San Diego State Univ
San Francisco State Univ
San Jose State Univ
San Marcos
Stanislaus
California Baptist College
California Lutheran University
California Maritime Academy
Campbellsville College, KY
Canisius College, NY
Casper College, WY
Catawba College, NC
Cazenovia College, NY
Cedar Crest College, PA
Cedar Valley College, TX
Cedarville College, OH
Central Carolina Technical College, SC
Central Methodist College, MO
Central Michigan University
Central Missouri State University
Central Oregon Comm. College
Central Wyoming College, WY
Chadron State College, NE
Chowan College, NC
Christian Brothers University, TN
Cisco Junior College, TX
Clackamas Comm. College, OR
Claremont McKenna College, CA
Clarion Univ. of Pennsylvania
Clark College, WA
Clark State Comm. College, OH
Clark University, MA
Clarkson College, NE
Clemson University, SC
Cleveland State Comm College, TN
Clovis Community College, NM
Coker College, SC
Colby-Sawyer College, NH
Colgate University, NY
College of Dupage, IL
College of Mount St. Joseph, OH
College of St. Catherine, MN
College of St. Scholastica, MN
College of The Holy Cross, MA
College of the Ozarks, MO
College of William and Mary, VA
Colorado College, CO
Colorado State University, CO
Columbia College, MO
Columbus State University, GA
Community College of Rhode Island
Concord College, WV
Concordia College, NY
Concordia University, MN
Concordia Univ. at Austin, TX
Connecticut College, CT
Consumnes River College, CA
Contra Costa College, CA
Coppin State College, MD
Cornell College, IA
Cornell University, NY
County College of Morris, NJ
Crichton College, TN
CUNY - York College, NY
Curry College, MA
Cuyahoga Comm. College, OH

Dakota Weslayan University, SD
Dallas Baptist University, TX
Danville Community College, VA
Davenport University, MI
Davenport University, MI
David Lipscomb College, TN
Davidson College, NC

Delaware County Comm College, DE
Denison University, OH
DePaul University, IL
Dickinson College, PA
Dickinson State University, ND
Dixie State College of Utah
Dordt College, IA
Drake University, IA

East Central College, MO
East Stroudsburg University, PA
East Tennessee State Univ., TN
Eastern Illinois University, IL
Eastern Mennonite University, VA
Eastern Michigan University, MI
Eastern New Mexico University
Eastern Oregon University
Eastfield College, TX
Eckerd College, FL
Edinboro University of Pennsylvania
Edison State Comm. College, OH
Edmonds Comm. College, WA
El Camino College, CA
El Centro College, TX
El Paso Community College, TX
Elizabeth City State Univ., NC
Elmhurst College, IL
Elmira College, NY
Embry-Riddle Aeronautical University, AZ
Emory & Henry College, VA
Enterprise State Junior College, AL
Eureka College, IL
Evangel University, MO
Fairfield University, CT
Fairmont State CollegeWV
Fayetteville Technical Comm. College, NC
Fergus Falls Comm. College, MN
Findlandia University, MI
Fisk University, TN
Florida Southern College, FL
Fond du Lac Tribal and Community College, MN
Fort Lewis College, CO
Franklin and Marshall College, PA
Franklin College of Indiana, IN
Franklin Pierce College, NH
Franklin University, OH
Frostburg State University, MD

Gallaudet University, DC
Gannon University, PA
Gavilan College, CA
Genesee Community College, NY
George Mason University, VA
George Washington Univ., DC
Georgetown College, KY
Georgetown University, DC
Georgia College and State Univ
Georgia Institute of Technology
Georgia State University, GA
Gettysburg College, PA
Glendale Community College, CA
Gogebic Community College, MI
Golden West College, CA
Gordon College, MA
Goucher College, MD
Grace College, IN
Grand Canyon University, AZ
Grand Valley State University, MI
Grays Harbor College, WA
Grinnell College, IA
Grove City College, PA
Guilford College, NC
Gustavus Adolphus College, MN

Hamilton College, NY
Hannibal-LaGrange College, MO
Hardin-Simmons University, TX
Harding University, AR
Harford Community College, MD
Harris-Stowe State College, MO
Hartnell College, CA
Hartwick College, NY
Hastings College, NE
Haverford College, PA
Hendrix College, AR
Highland Community College, KS
Hillsdale College, MI
Hobart and William Smith College, NY
Hofstra University, NY
Holy Cross College, IN
Holy Family College, PA
Houghton College, NY
Houston Baptist University, TX
Howard Community College, MD
Hudson Community College, NJ
Illinois State University
Illinois Wesleyan University
Imperial Valley College, CA
Indiana University Southeast, IN
Indiana University-Purdue University at Fort Wayne, IN
Inver Hills Comm. College, MN
Iowa Lakes Comm. College, IA
Iowa State Univ of Science & Technology
Itasca Community CollegeMN
Ithaca College, NY
Ivy Tech State College, IN
Ivy Tech State College-Lafayette IN

Jacksonville State UniversityAL
James H. Faulkner State Junior College, AL
John Brown University, AR
Johnson & Wales University, RI
Joliet Junior College, IL
Juniata College, PA
Kankakee Comm. College IL
Kansas City Art Institute, MO
Kansas State University, KS
Kean University, NJ
Keene State College, NH
Kellogg Community College, MI
Kennesaw State University, GA
Kent State University, OH
Keuka College, NY
Keystone College, PA

Lake Forest College, IL
Lakeshore Technical College, WI
Lane Community College, OR
Lassen College, CA
Lawrence Technologal Univ., MI
Le Moyne College, NY
Lebanon Valley College, PA
Lees-McRae College, NC
Lehigh University, PA
Lesley University, MA
Lewis Universit, IL
Lindsey Wilson College, KY
Linn-Benton Comm. College, OR
Longwood College, VA
Los Angeles City College, CA
Los Angeles Harbor College, CA
Los Angeles Valley College, CA
Louisiana College, LA
Louisiana State Univ., Shreveport
Louisiana Tech University, LA
Loyola College of Maryland
Loyola Marymount Univ., CA
Loyola University of Chicago, IL
Lynchburg College, VA
Lyndon State College, VT
Lynn University, FL
Lyon College, AR

Macalester College, MN
Madison Area Tech. College, WI
Madonna University, MI
Manchester College, IN
Mansfield University of Pennsylvania
Maranatha Baptist Bible College, WI
Marshall University, WV
Martin Luther College, MN
Martin Methodist College, TN
Marywood University, PA
Mayville State University, ND
McHenry County College, IL
Medaille College, NY
Merced College, CA
Mercer University, GA
Merrimack College, MA
Messiah College, PA
Michigan Technological Univ
Mid-South Comm. College, AR
Middle Tennessee State Univ
Middlebury College, VT
Milligan College, TN
Mills College, CA

MiraCosta College, CA
Mississippi College, MS
Mississippi State University, MS
Missouri Southern State College
Mitchell Community College, NC
Montana State University
Moraine Valley Community College, IL
Moravian College, PA
Morton College, IL
Mount Holyoke College, MA
Mt. San Antonio College, CA
Mt. San Jacinto College, CA
Muskingum College, OH

Nash Community College, NC
NEI College of Technology, MN
New Jersey Institute of Technology
North Central College, IL
North Dakota State University
North Harris Montgonery Comm College District, TX
North Shore Community College, MA
Northampton County Area Community College, PA
Northern Arizona University
Northern Kentucky University
Northwestern College, MN
Northwestern University, IL

Oakland University, MI
Oberlin College, OH
Occidental College, CA
Ohio Northern University
Ohio State University
Ohio University, OH
Oklahoma State University, OK
Orange Coast College, CA
Oregon State University, OR
Otterbein College, OH
Oxnard College, CA

Pace University, NY
Pacific Lutheran University, WA
Palo Alto College, TX
Pasco-Hernando Community College, FL
Philadelphia University, PA
Piedmont Technical College, SC
Pitzer College, CA
Plymouth State College, NH
Polk Community College, FL
Pomona College, CA
Porterville College, CA
Portland Community College, OR
Potomac State College of West Virginia University
Presbyterian College, SC
Princeton University, NJ
Reed College, OR
Reedley College, CA

Rhodes College, TN
Rice University, TX
Richard Bland College, VA
Richard Stockton College of New Jersey
Richland Community College, IL
Ridgewater College, MN
Rio Hondo College, CA
Riverside Comm. College, CA
Roane State Comm. College, TN
Robert Morris College, PA
Robert Morris College, Chicago Campus, IL
Rochester Institute of Technology, NY
Roosevelt University, IL
Rose State College, OK
Rowan University, NJ

Sacramento City College, CA
Saint Francis College, PA
Saint John's University, MN
Saint Leo University, FL
Saint Louis University, MO
Saint Mary-of-the-Woods College, IN
Salem International Univ., WV
Salisbury University, MD
San Juan College, NM
Santa Barbara City College, CA
Schreiner College, TX
Seminole Community College, FL
Shippensburg University of Pennsylvania
Shoreline Comm. College, WA
Simmons College MA
Sinclair Community College, OH
Skyline College, CA
Sonoma State University, CA
Southeastern Baptist Theological Seminary, NC
Southeastern Illinois College, IL
Southeastern Louisiana Univ
Southern Arkansas University, AR
Southern Illinois Univ-CarbondaleIL
Southern Illinois University at Edwardsville
Southern Methodist Univ., TX
Southern Nazarene University, OK
Southern Oregon College, OR
Southern Polytechnic State University, GA
Southern Wesleyan University, SC
Southwest Missouri State University
St. Charles County Community College, MO
St. John's College, NM
St. Olaf College, MN
State University of West Georgia
Stephen F. Austin State University, TX

Sterling College, KS
Stillman College, AL
Sul Ross State University, TX
Sullivan County Comm College, NY
State Univ. of New York
Albany
Buffalo
College at Potsdam
College of Technology - Farmingdale
Sweet Briar College, VA
Syracuse University, NY

Tacoma Community College, WA
Taft College, CA
Tarleton State University, TX
Tarrant County Junior College, TX
Tennessee Temple University, TN
Texas A & M. Corpus Christi TX
Texas A&M University, Texarkana
Texas Christian University, TX
The College of Saint Rose, NY
Thomas More College, KY
Towson University, MD
Transylvania University, KY
Tri-State University, IN
Trinity International Univ., IL
Trinity University, TX
Troy State Univ. at Dothan, AL
Tufts University, MA
Tulsa Community College, OK

Umpqua Community College, OR
Union College, NY
Union County College, NJ
United States Coast Guard Academy, CT
United States Naval Academy, MD
University of Alabama-Birmingham
University of Alaska CCREEAK
University of Arizona
University of Baltimore, MD
University of California, Irvine
University of Central Florida
University of Central Oklahoma
University of Connecticut
University of Delaware
University of Denver
University of Detroit
University of Hawaii
University of Houston, Downtown
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University of Illinois, Urbana-Champaign
University of Incarnate Word, TX
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- Baltimore County
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- Eastern Shore
- University College

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- Ann Arbor
- Dearborn

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- Crookston
- Duluth
- Morris
- Twin Cities

University of Missouri
- Columbia
- Kansas City
- Saint Louis

University of Nebraska, Kearney
University of Nevada-Las Vegas
University of New Mexico
- Alberqueque
- Gallup
- Valencia Campus

University of North Dakota
- Grand Forks
- Lake Region

University of North Texas
University of Northern Iowa
University of Notre Dame, IN
University of Oregon
University of Pennsylvania
University of Pittsburgh
- Pittsburgh
- Titusville

University of Portland, OR
University of Rhode Island
University of Richmond, VA
University of Rio Grande, OH
University of San Diego, CA
University of Science and Arts of Oklahoma
University of South Carolina at Union
University of Southern California
University of Southern Colorado
University of St. Thomas, TX
University of Tenn -Chattanooga
University of Texas
- Austin
- Pan American
- San Antonio

University of the Ozarks, AR
University of the Pacific, CA
University of Utah
University of Vermont
University of West Florida
University of Wisconsin
- Eau Claire
- Green Bay
- La Crosse
- Madison
- Milwaukee
- Oshkosh
- Parkside
- Stevens Point
- Stout

Utah State University

Valparaiso University, IN
Ventura College, CA
Villa Maria College of Buffalo, NY
Villanova University, PA
Vincennes University, IN
Virginia Commonwealth Univ
Virginia Polytechnic Inst & State Univ
Virginia Wesleyan College, VA
Vista Community College, CA

Wagner College, NY
Wartburg College, IA
Washington and Lee Univ., VA
Washington College, MD
Washington State University, WA
Webber College, FL
Weber State University, UT
Wellesley College, MA
West Chester University of Pennsylvania
West Texas A&M University, TX
West Valley College, CA
Western Carolina University, NC
Western Iowa Technical Comm. College
Western Kentucky University
Western New England College, MA
Western Oklahoma State College
Western Piedmont Comm. College, NC
Western State College of Colorado
Westfield State College, MA
Westmont College, CA
Wheaton College, IL
Whitman College, WA
Whitworth College, WA
Wichita State University, KS
Widener University, PA
Willamette University, OR
William Rainey Harper College, IL
Williams College, MA
Winthrop University, SC
Wittenberg University, OH
Woodbury University, CA
Worcester Polytechnic Inst., MA

Yakima Valley Community College, WA

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